SEX ROLE STEREOTYPES IN GREEK PRIMARY SCHOOL TEXTBOOKS

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to my husband
to my children, Konstantina and Giannis

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INTRODUCTION

Equality of educational opportunities for the two sexes has been the topic of numerous studies. Sex role socialisation starts from the moment the child is born, with the family having an important role which is later reinforced by the school. During schooling, although the family remains one of the essential factors in the children's socialisation, written words begin to evolve as another important medium for the configuration of the sex role. School transmits knowledge and at the same time prepares children for their roles in society. The values used by the school to form and shape the pupils' characters are always the dominant social values. In that way every society can by judged by the instructive content of its educational institutions.

The theories of socialisation say that an important factor in forming attitudes and beliefs regarding sex roles is printed matter. The studies show that the roles, the professions, the activities and the behavioural traits presented as appropriate, do influence the shaping of opinion.

Indeed, the role of school textbooks seems to be especially influential, since children spend a great part of their life studying them. It seems that school textbooks are a product of the prevailing social ideology and therefore their study should be particularly enlightening regarding a society's way of thinking.

Since the end of the 1960s thorough research has been carried out at an international level regarding the characteristics, the qualities, the professions and the roles assigned to women in school textbooks.

In Greece the equality of the two sexes is provided by law where it is mentioned that one of the basic educational goals is sex equality. Certainly

over the past few years in Greece many important attempts aiming at the modernisation of the Greek educational system and elimination of social discrimination within the context of educational materials have been made. The sensitization and the struggle - mainly by feminists and women's organisations - has contributed to the progressive renewal of school textbooks.

However, how substantial are these changes in actual fact? Has social modernization advanced to such an extent that both men and women are evenly spotlighted and are boys and girls really free from the traditional beliefs concerning sex roles?

It is rather interesting to see how schools, these official educational institutions, through the books they use, transmit their notions regarding the role of the two sexes to children of school age; a period of life which according to theory and studies of childhood is considered to be decisive in sex role socialisation.

My purpose in this research is to examine the way in which the two sexes are presented in school textbooks. The incentive for pursuing my research was my own experience of using school textbooks and the observation of everyday reality. Until the present time research in Greece regarding the image of the two sexes has been limited to the primary school reading-scheme books. With this study I intend to give a detailed picture of the beliefs about sex roles as these are presented through the whole range of school textbooks.

My ambition is that my work - in combination with other similar studies - will help instructors to comprehend and point out the traditional standard beliefs about the two sexes depicted in the textbooks which are used on a daily basis in schools in Greece.

This research could sensitise instructors and simultaneously help them to be aware of and recognise the stereotype beliefs in the books they use. In this way they will be able, with the appropriate interventions and discussions, to consider their validity in relation to the children they teach.

The present study is presented in 14 chapters. It is divided into two parts. The first part deals with the wide theoretical-work related to socialisation and the sex roles (Chapters 1-2). The third chapter discusses the agents of sex role socialisation (the family, peer groups, media, school). The fourth chapter studies the woman's professional role. Chapter 5 includes a brief description of the Greek educational system and an examination of a girl's place within it. The sixth deals with books as a factor in the configuration of the sex role. Chapter 7 includes a review of the related studies. The second part of the thesis includes the main body of the study, the methodology (chapter 8), the analysis of the results (chapters 9-13) and finally the conclusions and suggestions (chapter 14). Chapters 9-13 have their own separate bibliographies to facilitate reference for readers interested in one particular curriculum area.

CHAPTER 1

SEX ROLE SOCIALISATION

1.1. Socialisation

A basic precondition for the existence and the functioning of every society or social group is the socialisation of their members, namely the assimilation of cultural elements, of values and rules that constitute and express the particular society or group. The internalizing, the assimilation and the manifestation of socially accepted manners, the stagnation of rules and values, namely the formation and the constitution of the personality of individuals, is mainly a result of a complex and complicated procedure known as socialisation.

"The procedure through which the individual forms its behavior, learns the way of life that the social group to which it belongs, transmits directly and indirectly, is called socialisation".

(Nasiakou, 1982, 62)

According to another definition:

"Socialisation is the transmission of behavior, roles, attitudes and beliefs to the next generation. By direct prescription, by example and by implicit expectation, a variety of people in a variety of relationships influence the growing individual".

(Weinreich, 1982, 18)

Socialisation constitutes a dynamic functioning. It is continuous and incessant precisely because the allocation and the evolution of roles during a lifetime are continuous. Socialisation is a lifelong process although it refers primarily to children and adolescents. Through socialisation individuals acquire knowledge, dexterity and dispositions that render them capable of participating in life, and in activities of social groups and of the total society collectively. Socialisation is instruction and thus we can discriminate it from the maturing that ensues relatively automatically as a result of the development of the potentials of human nature.

We have to underline the fact that the formation of human personality is the result of a complex procedure, of the dynamic interaction of two basic factors: of the hereditary constitution with all the peculiarities that it presents in every person, and of socio-political factors whose variety of aspects is so infinite that it is impossible for us to speak about "personality" without stressing its particularity and its uniqueness. In theory every individual has, to a large extent, the occasion of forming its evolution. But this freedom is limited by the forces that function inside the group to which it belongs, and by the total pattern of the institutions in the society (Nasiakou, 1982, 25).

"Socialisation, then is a process that allows the human animal to learn to live in his society according to its values. It permits him to develop a social self and to discover his status within the framework of his world. It is a process that encourages people to behave in ways that will gain social approval and the ability to predict the reactions their actions will evoke".

(Duberman, 1975, 25)

Inside the wider field of socialisation, boys and girls become conscious of the categorization and the segregation of people into two sexes, they place themselves in one of the two categories and become familiarized with it, and encourage themselves to manifest the socially defined and accepted characteristics, manners, capabilities, attitudes etc. for their sex. The entire procedure that begins from the first moments of birth for children and perhaps even before, constitutes one of the most important aspects of wider socialisation, known by the term "sex role socialisation".

There is a distinction and a segregation between the terms 'sex' and 'gender'. Young children as well as many adults often confuse maleness with masculinity and femaleness with femininity. They confuse biological sex with gender, which is culturally acquired.

"Sex is an ascribed social status referring to the biological differences between people...Biology determines maleness and femaleness. This is sex status- rarely misperceived, rarely alterable. Like other ascribed statuses, it is acquired at birth and it is independent of skill, effort, or ability.

A social role is attached to one's sex status, as roles are attached to all statuses. Here I shall refer to this as one's gender role, meaning the socially learned patterns of behavior that differentiate men from women in a given society. Masculinity and femininity are gender roles, acquired during one's lifetime through learning, role taking, imitation, observation and direct instruction. They are dependent on skill, effort and ability". (Duberman, 1975, 26)

Sex therefore refers to the most basic physiological differences between men and women. Gender refers to all
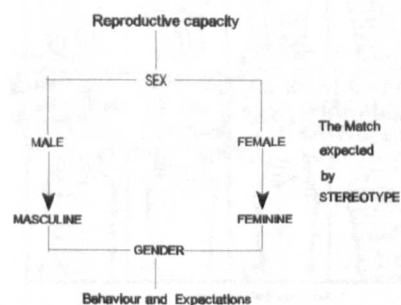
Figure 1. (Source: Gender and Education Perspectives, 1988, 23).

differences between men and women other than the basic physiological ones. It refers to specific social and cultural patterns of behaviour, and to the social characteristics of being a man or a woman in particular historical and social circumstances. Gender is created by society and gender differences vary from one culture to another (Oakley, 1972, 158).

There is one other concept here which is sex role. Sex role refers to the patterns of behaviour and the aptitudes and attitudes that society expects from people simply because they are male or female.

"Sex role refers to the collection of behaviours, occupations and personality characteristics which are popularly regarded as sex typical, or as primarily appropriate for one sex or the other. Sex roles are thus distinct from sex differences or sex related phenomena, and from gender identity".

(Serbin, 1985, 19)

Sex role socialisation is made up of many procedures, used to qualify the individuals of male and female gender for the roles which are established as appropriate by the society. This procedure is very complicated and is the intermediate step connecting the roles given by the society and their acceptance and performance or not by its members (Beach, 1965, 133).

Source : Statham, 1986, 7

Boys and girls

Decided differences have been found between the two sexes in physical characteristics, in mental abilities, in school life, in professional life and generally in the personality. The

theory about sex role was used to analyse the difference that exists between the status of men and women, to explain how they are moulded for these roles and to describe the modifications and the conflicts that have occurred in these statuses.

The sex status to which one is born has a deep influence on one's entire life. The question is whether the gender role that almost invariably accompanies sex status has biological origin and is therefore unalterable or is acquired by social process and therefore can be altered. All major theories assume that gender differences have always existed in human societies and always will. Beyond this basic agreement, every theory offers a different explanation, each one including elements which may or may not be acceptable (Duberman, 1975, 29).

1.2. Sex Role Socialisation Theories

The theory about the formation of the sex roles is related to the general problem of whether human behaviour is determined by heredity or by the environment. There are three general viewpoints. The biological approach says that men and women are born with distinctly different features and different psychological traits, and thus they are destined to fulfill different tasks during their lifetime. Opposing the hereditary view is the environmental view that says that sex differences are socially learned, and they are entirely a product of culture. The third viewpoint is a middle-of-the-road approach because it is based on the relationship between heredity and environment.

1.2.1. Biological Determinism Theories

The conservative view says that gender differences and inequalities based on gender are natural, that they are drawn from biological differences and are unchangeable parts of a natural order. Here belong the biological determinism theories. Biological determinism theories claim those gender differences between males' and females' attitudes, aptitudes and temperaments primarily result from biological factors such as chromosomes and hormones. Chromosomes are complex chemical structures included in every cell of the body. Two of the forty-six chromosomes that the human body usually carries in its cells are called the "sex chromosomes" due to their content which is genetic information, responsible for creating the male and female reproductive systems. The result is a female body form if the sex chromosomes are both X and a male body form if the sex chromosomes are X and Y. Chromosomes are responsible for the hormones produced by the body that form the sexual characteristics of the person and determine the physical growth of the two sexes (Measor & Siker, 1992, 6).

Hormones are also believed to play an active role in gender role development. Androgen promotes male sexual activity while oestrogen and progesterone promote female sexual activity. Androgen is the prebirth determining hormone. If it is present, the individual will be developed into a male; if it is absent, into a female. This is the position of those scientists who postulate biologically determined gender role development. One's sexuality depends on one's chromosomes and on the kind of hormone present. If the chromosomal pattern is XX and the present hormones are oestrogen and progesterone, the individual will behave in a feminine way; if the chromosomal pattern is XY and the present hormone is androgen the person will be

masculine (Oakley, 1972, 22).

It is very difficult to categorically establish the extent to which differences are biological or social in origin. A part of the problem is that biological theories are based on experimental findings, from work done on animals, and we do not know if we can extend the findings to human beings.

Biological determinism has difficulty in explaining historical or geographical variations in the position of both sexes. The meaning of being a man or a woman differs from society to society. If the distinction were biologically rooted there should be one universal form for each sex.

Anthropological research has shown that a united universal male or female personality does not exist. The anthropologist Margaret Mead (1950, 1963, 1977) describes certain tribes in which there are undifferentiated characteristics or they even reverse the stereotypes that we find in modern societies. In the Arapesh tribe for example, both men and women are cooperative, polite, kind-hearted and patient. They thus display traits that in our society would be attributed mostly to women. On the contrary, in the Tchambali tribe the roles of the two sexes are different but they are also the reverse of our norms. Women have masculine traits according to our norms (aggressiveness, practical mind, good performance in fishing and in commerce), while men have feminine traits (they occupy themselves with domestic tasks, they are timid, sensitive, polite, dependent, with a well developed artistic vein).

1.2.2. Social Learning Theory

There are a number of different theories on socialisation and on how it works, which can be divided into two groups; social learning theories and cognitive developmental theories. According to the social learning theory,

socialisation happens through identification with social models. This theory is in close relationship with behaviourist theory (Skinner) but the procedures of identification and of behavioural formation are considered here more complex than the position of behaviourism so that a model functions simply as a stimulant or a helper in order to provoke a certain type of behaviour. Stimulus response views consider the child as passive, totally dependent on reward and punishment.

Social learning theory grants a more active part to the child as he or she imitates role models. The child learns the sort of behaviour that is "proper" for its sex through reward and punishment and through the observation of live models (parents) and symbolic models (from films, television, books). As the child matures, social learning becomes more generalized because he or she begins to adopt role models and to imitate them.

"It has been pointed out that observational learning is generally labeled "imitation" in experimental psychology and "identification" in personality theories. Despite the fact that numerous distinctions have been proposed, the two terms really describe the same behavioral phenomena: both "imitation" and "identification" refer to the tendency for a person to reproduce the actions, attitudes and emotional responses exhibited by real life or symbolic models..."

(Mishel, 1966, 57)

From a social learning viewpoint, sex role preferences and patterns of behaviour are highly dependent on societal expectations and social reinforcement. Children use models as sources of information for appropriate and inappropriate behaviour (Bandura, 1977).

"From the expectations and guidance communicated by parents early, children can see in time that one set of characteristics is desirable for females and another set is preferred in males. Their peers are receiving similar messages. These messages are reinforced by toys, books, advertising, television, and extended family and friends".   (Ring, 1988, 32)

However, the choice of a model is premised on the reinforcing qualities of the model. A lot of research has beeen done in relation to the circumstances that facilitate the function of models. For instance, parents can function as models more than any other person because their relations with their children are more frequent and direct. A nurturing relationship between the observer and the model seems to simplify imitation. Children tend to imitate adults who are friendly, warm, and attentive (Bandura & Huston, 1961). Characteristics of the model such as the power and willingness to reward and probably the observer's own motives are likely to increase the observer's attentiveness.

This theory sees femininity and masculinity as socially acquired, because approval is almost always forthcoming when a child adopts the gender role that is appropriate to his or her status. Sex status is assigned at birth and the infant is treated afterwards, in accordance with it. Children choose a pattern of behaviour that models of the same sex demonstrate because quite often they are strengthened and less criticised when they imitate these models and because gradually they learn that the social environment has the same expectations (Nasiakou, 1982, 87).

One major problem with this theory is that all experiments based on it have been done in laboratories using patterns of behaviour that can be reinforced. Another disadvantage of the theory is that it treats children as passive receivers and overestimates external influences. Of course children inside the social environment choose patterns of behaviour, they imitate

others, they generalize but they do not have active roles in interacting and structuring their environments. The theory of social instruction recognizes the contribution of the cognitive abilities of children in the formation and internalizing of the typical in each sex's patterns of behaviour but it does not attribute to them the determinative influence that the theory of cognitive development attributes.

1.2.3. Cognitive Developmental Theory

Cognitive theories have been developed more recently than social learning ones. Their main advantage is that they accept the idea of a child as an active member that takes part in forming his/her experience and formulating sex role concepts. This approach stands far from the social learning theory, which admits the determinative imposing role of society upon the individual. Social learning theory views the child from the outside but has much less to say about what goes on in the child's head. The theory of cognitive development emphasizes children's way of thinking. Children are considered self-socialised (Tavris & Wade, 1984, 215).

Kohlberg principally expresses this theory and basing himself on Piagetian theory about the cognitive development of a child, claims that sex role socialisation is associated directly with and is a result of the cognitive development and of cognitive abilities of the child on the basis of which it forms its experience from the social environment. According to the theory of cognitive development, it is neither biology nor society but their conception by the child that determines gender development.

"The basic sexual attitudes are not patterned directly by either biological instincts or arbitrary cultural norms, but by the child's cognitive organisation of his social world along sex role dimensions".

(Kohlberg, 1966, 82)

The child makes cognitive categories of himself or herself as a boy or a girl and according to this judgment it then arranges the subsequent development of a pattern of behaviour. The child begins to make this sort of categorisation at about the age of four, but the process is not really complete until the age of six or seven, when the awarness of genital differences is established. At an early age, approximately between three and a half to four years old, children learn the identities of objects, including themselves. At this stage, children know their own gender identity, just as they know their name, but they are not yet aware of gender constancy. By the time children become aware that physical objects have invariable identity, they also become aware that their gender identity is invariable too (Peterson-Intous, 1988, 43).

The cognitive developmental position has received support for the assertion that, while children understand the gender labels (boy, girl) and apply them as early as age three, gender constancy itself is absent in the early years and becomes increasingly evident at around the age of seven (Marcus & Overton, 1978, 434).

Kohlberg has proposed that the development of sex role concepts is related to the emergence of classification ability. As children become more convinced of the unchangeability of their gender identity, they increase their same-sex preferences to seek information consistent with their gender.

Kohlberg further assumes that self-categorisation determines some values. Accordingly, children tend to value positively activities that are congruent with their gender identity. So the children who label themselves as boys also value boy-related objects, activities, occupations etc. Girls show the same general patterns.

"After masculine-feminine values are acquired, the child tends to identify with like-sex figures, in particular the like-sex parent. Desire to be masculine leads to the desire to imitate a masculine model, which leads to a deeper emotional attachment to the model".

(Kohlberg, 1966, 165)

This assumption assigns priority to gender identity. Children first learn to label their own sex and then they seek roles related to their sex.

The cognitive developmental theory accepts that the consciousness of sex precedes and is a precondition for the imitation of individuals belonging to the same sex or of symbolic models, while on the contrary for the social learning theory, imitation and copying of patterns of behaviour of individuals belonging to the same sex or of symbolic models, and the rewards and punishments drive the child to comprehend its sex.

The main criticism that has been expressed of Kohlberg's theory is that children start imitating and manifesting the socially defined and accepted patterns of behaviour for their sex before they acquire the understanding of the stability of sex. Certainly the acquisition of the meaning of the stability of sex, can accelerate the process of socialisation as to the sex role, but it is not regarded as a basic precondition for this process to begin.

Although the theories of social learning and cognitive development are usually presented as competing models of socialisation, it is possible to combine them both in order to make a clear and coherent picture. Imitation, modelling, reinforcement and cognitive processes, all play a part in children's sex role socialisation.

1.2.4. Psychoanalytic Theory

Although Freud he did not engage in work on sex role socialisation, he influenced many psychologists' thinking regarding sex role development. The

field of psychoanalytic theory is huge. There is not one theory but many approaches. In general, Freud assumed that the human personality develops in a series of psychosexual stages. Presumably, the child passes through the stages of childhood, the oral, the anal, and the phallic, during the first six years. Gender differentiation appears during the phallic stage. The genital eroticism of the phallic phase and the significance the child places on genital sex difference on account of this eroticism, leads boys to become primarily masculine and girls primarily feminine, in their subsequent behaviour.

The dawn of genital eroticism leads the boy to desire his mother (otherwise known as the Oedipus complex, based on the Greek myth about Oedipus who killed his father and married his mother) and his father becomes a threatening figure. This conflict provokes a fear, that his father will castrate him (Castration complex). The fear is resolved by identifying with the father (Freud, 1976, 36).

The process by which girls come to identify with their mother is less clear in Freudian theory. Girls realise that they do not have a penis. They have been "mutilated" by having the penis removed. Therefore, girls blame their mother. Because of their anger towards their mother, they attach themselves to their father. This result is a failure to resolve fully what Freud calls the *"Electra complex".* Therefore, their superego cannot be developed completely. It is obscure how girls come to identify with their mothers. They should have no fear of castration that binds them to their mothers, since they learn that all females lack a penis. Nevertheless, girls somehow come to identify with their mothers, they begin to imitate and to model their own lives on their mothers. In the final stage of normal female development, young women become interested in men as an avenue to having a surrogate penis, the carrying of a

child (Igglessi, 1990, 23). The inferior status that Freud assigned to women is a notable aspect of Freud's thinking and it caused great unhappiness among thousands of women.

In general psychoanalytic theory predicts that children first learn about their own genitalia and then acquire information about gender roles. The different anatomic structure of the organs, and the subconscious sexual urges and desires of the child towards the parent of the opposite sex have a determinative importance for the development, internalizing and display of different characteristics of the personality of the sexes.

The ideas that led Freud to establish his theory were derived from his work on patients. However, it was a limited biased sample that was not representative of others. Freud has also been attacked for having a negative view of women. The feminist movement criticized the man-centred psychoanalytic theory and particularly its origin in the anatomic gender differences. Modern thinking absolutely rejects the biological determinism which, having Freud as its main supporter, is based on the premise that women are socially inferior to men. Freud's dependence on anatomy to analyse the system does not allow for multiple influences of culture, society and learning (Igglessi, 1990, 30).

Contemporary psychoanalytic thinking has challenged some of his approach and emphasized femininity in a positive sense where Freud saw only the negative. The notion of difference and of complementarity of male and female has been suggested in place of Freud's notion of inferiority and dominance.

Rosenberg and Sutton Smith (1968), who composed these theories, claim that psychoanalytic theory and biological theories are most useful in

explaining the genesis of sexuality, while the theory of social learning demonstrates the importance of role models during childhood, that sociology points to the continuous nature of gender role development, and that anthropology highlights the significance of cultural needs. Thus, sex role development is the result of all influences: biological, psychological and cultural.

This problem has preoccupied researchers for decades. Scientists today accept that we cannot exclude either the one or the other factor because all are important. As to the differentiation of behaviour of the two sexes, they accept that it is due to the interaction of social and biological factors. Although it is indisputable that social factors play a significant role in the differentiation of behaviour of the two sexes, it is equally certain that the role that the society imposes on each sex is dictated to a point by clearly biological factors.

The formation of the role of the two sexes in the course of socialisation, creates a chain of problems and conflicts for each sex. This is due to the fact that apart from the biological, social and cognitive dimensions there is also a political dimension.

"The choice to emphasize either heredity or environment in the explanation of human behavior is not a trivial one from either a scientific or a political point of view. An emphasis on heredity, on biological determinism, means, scientifically, that a researcher will not look for socioenvironmental explanations for behavior she/he observes. Politically, it leads to the hardening of belief in the immutability of the status quo, in the unchangeability of current social arrangements. An emphasis on environment, on the other hand, may blind a researcher to biological underpinnings of behavior, thus blocking the solution to certain problems. Politically, the latter emphasis is associated with more attempts to change social arrangements, to improve the social environment in order to change behavior".   (Lips, 1988, 47)

CHAPTER 2

SEX ROLE STEREOTYPES

2.1. Stereotypes: Meaning and Definition

I personally believe that it is rather necessary before proceeding to the analysis of the schoolbooks, to define some terms on which the research is based. Etymologically the term *"stereotype"* belongs to the same family as the word *"stereotypy"*, which is used in typography and refers to a printing process of a chain of similar pages, with metal tables (stereotypical plates). In a figurative sense the term means a lack of variety and originality or the appearance of the same form.

Stereotypes, in general, are easy ways of codifying the knowledge and experiences of individuals. It is a form of classification that facilitates and simplifies the complexity of the environment.

"Stereotypes are preprepared forms of perception - thought that come in between reality and the perception that we come to create about this reality, provoking simplifications and generalisations which distort it".   (Filias et al., 1983, 237)

According to another definition:

"Stereotypes are generalized beliefs about the attributes associated with members of social groups. They may be conceptualized as base rates, or estimates of the probability that a person will have a particular attribute given that the person belongs to a particular social category".

(Rasinski, Crocker & Hastie, 1985, 317)

Every society and every group have their own stereotypes which categorise them and further their socio-political and financial interests. Therefore, the terms stereotypes, perceptions and prejudices are used, in relation to different social classes or professional groups or in relation to gender. Stereotypes especially from this point of view, are connected with roles according to social expectations to which individuals are obliged to respond. So we refer to stereotypes with regard to the role of woman (good housewife) or of man (protector, the head of the family) or even of child (obedient, disciplined) (Filias et al., 1983, 240).

Stereotypes and prejudices change under different social systems. During the transition from one social system to another, rules and stereotypes of the new dominant ideology are created and imposed.

Stereotype is distinguished from prejudice because stereotype is a category of perceptions while the term *"prejudice"* refers to one particular position that is defined and governed by stereotypes. Stereotypes, very often reflect social prejudices. Stereotypes involve only points of view concerning the differences between groups and are not accompanied necessarily by positive or negative judgments. The negative estimation of individuals or of their activities, because they belong to a particular group is known as prejudice.

Stereotypes may take the form of images, attitudes, feelings and activities. Regarding their content, stereotypes may refer to the physical characteristics of a group, the intellectual and emotional qualities of its members or certain aspects of its position in society (Michel, 1986, 16).

The strength of a stereotype and its usefulness in the process of socialisation is based on three factors: its simplicity; its immediate recognisability;

and its implicit reference to an assumed consensus about some attribute or complex social relationship (Perkins, 1979, 141).

Briefly the features of stereotypes are:

1.   They simplify. The images and the characteristics that are attributed to a condition of the external world through stereotypes are poor in content, oversimplified and therefore abstracted from reality.

2.   They generalize.

3.   They are assimilative. Since the stereotype simplifies, generalizes and is immoderate, it can be schematized, restrained, assimilated and therefore it can become internalised easily (Filias et al., 1983, 244).

Psychologists think of stereotypes not simply as a set of beliefs about specific groups of people, but acknowledge them as structures that assist in the way individuals process information. These knowledge structures, often called schemas, act as self-perpetuating channels of information, that guide the individual to pay attention to information that fits the schema or the stereotype and to ignore things that do not fit.

"Schemas are naive theories that guide information processing by structuring experiences, regulating behaviour, and providing bases for making inferences and interpretation".

(Martin & Halverson, 1981, 1120)

Consequently, stereotypes are imposed by society with the mechanisms of socialisation but they become internalised and strengthened through the procedure of formation of the perception.

2.2. Sex Role Stereotypes

The transportation of patterns of behaviour, of roles, attitudes and values to the next generation is effected through the mechanism of socialisation. Individuals learn which behaviour is proper for each sex through the course of socialisation. The vehicles of socialisation have stereotyped points of view about the characteristics attributed to each sex and sex role socialisation reflects the expectations based on these points of view. There are stereotypes; myths about the differences between the sexes and which influence views with regard to what sex roles should be, and particular the vehicles, the course and the content of socialisation (Weinreich, 1982, 25). Sex role stereotypes are oversimplified and preprepared social perceptions related to the patterns of behaviour, abilities, roles and professions of individuals simply by virtue of their sex. They can be descriptive (this is how the two sexes are) or prescriptive (this is how they should be). Sex role stereotypes reinforce sex identity. They dictate what people should be like on the basis of sex and thus they limit and channel children into prescribed roles which affect their sex identities.

"Sex role stereotypes of males and females are rigid beliefs in and applications of sex roles to all females and males in all cultures held to be universally true and biologically natural, and usually accepted without question".   (O'Brien, 1988, 5)

Sex role stereotyping is related to the concept of sexism which refers to a process whereby individuals are socialised into thinking that they have to act and think in a way proper to their sex (see Figure 2).

Sexism is an attitude which demeans, excludes, under-represents and stereotypes people on the basis of gender".

(Michel, 1986, 15)

Frazier and Sadker go further in defining sexism:
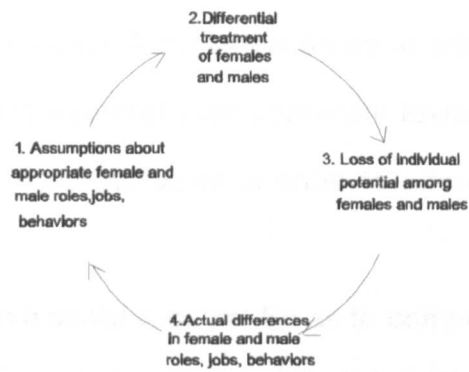
Source: Sadker & Sadker, 1982,11

Figure 2: Sexism

"...a belief that the human sexes have a distinctive make up that determines their respective lives, usually involving the idea that (1) one sex is superior and has the right to rule the other (2) a policy of enforcing such asserted right (3) system of government and society based upon it".   (Frazier & Sadker, 1975, 2)

Bem's (1982) gender schema theory states that sex-typed individuals, both masculine and feminine, have internalized standards of appropriate behaviour based on gender identity and act according to those standards. Androgynous individuals are postulated to be aschematic in terms of gender role identity. Bem has described these individuals as non sex-typed, that is, men and women who are neither masculine nor feminine in their sex role identity and whose behaviour and attributes are not influenced by gender considerations (Bem, 1974, 1977). Research in gender roles and androgyny concludes that androgynous people are psychologically healthier than sex-typed people (Bem, 1974, 1975).

In contrast there is the self-schema theory (Marcus et al., 1982). According to self-schema theory males have a masculine self-schema but not a feminine one, females have a feminine self-schema but not a masculine one, androgynous individuals have both a masculine and a feminine self-schema, and undifferentiated individuals have neither a masculine nor a feminine self-schema.

Labels of male and female convey dynamic expectations of the person to whom we refer. We use the information we get from labels so as to orient our behaviour towards other individuals and to interpret their behaviour towards us. Furthermore, we use labels in relation to our activities in order to orient them relatively (Lips, 1988, 12).

Sex role stereotypes do not exist in a social vacuum. So as to comprehend the structure of stereotypes, it is necessary to be aware of the social relations between groups. Individuals who occupy ruling positions usually exercise roles that presuppose and imply the possession of an important social, political or cultural power, while in dominated positions, they adopt roles which indicate that the possibility of possession and exertion of social power is limited. In the case of men and women, there is in many societies, as in ours, a longstanding history of hierarchical relations between the two groups. Men have more social power than women and have been the 'rulers', whilst women have an inferior status and are the dominated. One function of stereotypes is to support the prevailing status quo, therefore it is not surprising that ruling groups are considered as having more abilities and intelligence in relation to dominated groups. Stereotypes perpetuate themselves simply because they justify prejudice against subordinate groups. Stereotypes and prejudice participate in a dynamic interrelationship and they are not simply static collections of points of view and evaluations (Lips, 1988, 2).

Illustration from "Ourselves and Our World", 1st Year, OEDV, 1989, 16.
Only boys climb trees and girls watch them.

There are two reverse views of the acquisition of sex role stereotypes and their role in psychological and social adjustment. The first view considers the establishment of a traditionally sex-typed identity to be one of the major developmental tasks of childhood and adolescence (Kohlberg, 1966; Erikson, 1975).

In contrast to this view several theorists (Block, 1973; Bem, 1974; Pleck, 1975) have proposed that traditional sex-typing limits the growth of personality. It has been hypothesized that sex stereotypes are detrimental because they oversimplify perceptions of reality and restrict life options. Strong masculinity fosters inappropriate competitiveness, domination, and insensitivity, while high femininity, untempered by masculinity, fosters passivity, dependence, and incompetence.

2.3. Content of Sex Role Stereotypes

In recent years, researchers have realised that sex role stereotypes carry a variety of characteristics as regards to how people appear, act, think and feel. Characteristics, roles, behaviour, professions, physical appearance have a male and a female version.

So the male stereotype embodies characteristics of personality such as: aggressiveness, rivalry, independence, determination, courage, audacity and cleverness. On the contrary, the female stereotype refers to characteristics such as passivity, dependence, cowardice, coquetry, politeness, compliance.

Deaux and Lewis (1984) offered a componential model of gender stereotypes. They distinguished between at least four content areas in the gender stereotype: role behaviour, traits, occupations, and physical characteristics. The role component includes activities, interests, games, and toys considered more appropriate for one gender. Traits include characteristics such as sensitivity (feminine) or aggressiveness (masculine).
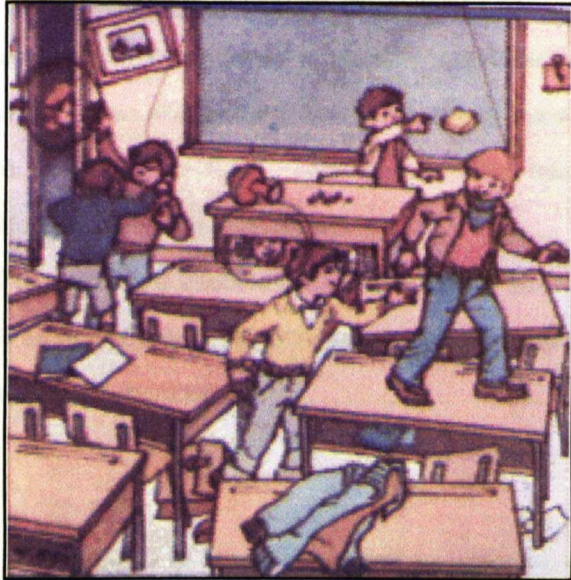
Illustration from "Ourselves and our World", 1st Year, OEDV, 1989, 17.
Children confirm society's expectations: boys are expected to be active and girls passive onlookers.

In trying to describe the themes inherent in these stereotypes, psychologists have relied on a dichotomy which was first proposed by two family sociologists: instrumentality against expressiveness (Parsons & Bales, 1953, 137). The masculine stereotype is considered to be characterised by expectations of instrumentality: an orientation towards action, accomplishment, leadership. The feminine stereotype, on the other hand, combines attributes that add up to expressiveness: an orientation to emotion and relationships.

Congruent with this pattern are the findings of Broverman who set out the following conclusions:

1.   A strong consensus about the differing characteristics of men and women exists across groups which differ in sex, age, religion, marital status, and educational level.

2.   Characteristics ascribed to men are positively valued more often than characteristics ascribed to women. The positively-valued masculine traits form a cluster of related behaviors which entail competence, rationality, and assertion; The positively-valued

feminine traits form a cluster which reflects warmth and expressiveness.

3.   The sex-role definitions are implicitly and uncritically accepted to the extent that they are incorporated into the self-concepts of both men and women. Moreover, these sex-role differences are considered desirable by college students, healthy by mental health professionals, and are even seen as ideal by both men and women.

4.   Individual differences in sex-role self-concepts are associated with (a) certain sex-role relevant behaviors and attitudes such as actual and desired family size, and (b) certain antecedent conditions such as mother's employment history.

<div align="right">(Broverman et al. 1974, 61)</div>

Similar research had been done by clinical psychologists and psychiatrists. The results indicated that a double standard of health exists for men and women. The general standard of health is actually applied to men only, while healthy women are perceived as significantly less healthy according to adult standards (Broverman et al., 1970).

The existing stereotypical differences between men and women are approved and even idealized. The masculine role is valued more highly by men and women. So women tend to have a low estimation of themselves because female characteristics are less socially accepted. As girls grow older they experience a conflict: they have to decide whether they will choose positive characteristics that are regarded as desirable for the opposite sex and which are considered unfavourable and

Illustration from Science Textbook, 5th year, OEDV, 1991, 43.
Boys are always active while girls do not participate in their games.

inappropriate for women.

There is a dissociation between explicit (written and oral) and latent or implicit stereotypes. The category of explicit stereotypes includes for example the school curriculum which may be divided into typically women's and men's subjects. This kind of stereotype exists similarly in everyday life and practices which discriminate between boys and girls. For instance, parents often say "Boys don't cry". There are latent stereotypes in social attitudes and patterns of behaviour that differ according to the sex of the individual. It is well accepted to approve and praise a girl because she is cute and graceful, but the boy because he is good at school. Latent stereotypes can be guided through omissions that mirror the one sex with specific qualities and roles while they omit others. For example, motherhood certainly is important and worthy of respect but of course it is not the only role of women (Michel, 1986, 16).

Stereotypes of female and male attributes are unreal, harmful and limiting to the full development of an individual.

CHAPTER 3

AGENTS OF SEX ROLE SOCIALISATION

3.1. Family

I consider it important to examine all the vehicles which participate in children's sex role socialisation, before studying in detail schoolbooks as a medium of socialisation. Before children go to school they have already acquired sex role stereotypes. As we have seen earlier, children learn about sex roles very early in their lives, probably before 18 months old (Flerx et al., 1976; Kuhn et al., 1978; Ring, 1988; Weinraub et al., 1984). The procedure of sex role socialisation with identification, imitation and social learning starts inside the family. We can say that the course of socialisation starts before birth according to the preferences that the parents show as regards the sex of the foetus. Research shows that there is a clear preference for the male sex and parents who have had a girl, attempt a second and a third pregnancy so as to have a boy (Hoffman, 1977). It has been discovered that if couples had been allowed to choose the sex of their child, the percentage of boys would have been 33% higher than that of girls (Williams, 1976).

Children are born into a society that has a particular preference for the male sex and where social stereotypes await children even before they are born. Children grow up in a family structure that is usually typical of their society: they observe and absorb the roles of adults. The family constitutes the most important element in sex role socialisation; it is the most immediate and the most extensive in terms of time, of children's contacts with role models and provides an image

of adult life that has probably the longest lasting influence on the child.

Parents begin the process of sex role socialisation soon after the sex of the baby is known. In one study, 82% of parents' comments within 20 minutes of the baby's arrival, were made about the infant's sex (Woollett, White & Lyon, 1982). A study of parents' attitudes after delivery found that they described their daughter as *"softer"*, *"little"*, *"cute"* and *"finer featured"* and their sons as *"firmer"*, *"more alert*" and *"stronger"*. The researchers concluded that these differences were in *"the eye of the beholder"*. The babies were in fact evenly matched in terms of birth length, birth weight and Apgar test (general health ratings) (Rubin, Provenzano & Luria, 1974; Condry & Condry, 1976).

Similar studies which have been conducted with the medical personnel attending the deliveries of babies (Scanzoni & Fox, 1989) as well as with students (Sobieszek, 1978) showed the same results.

It seems that stereotyped social perceptions and expectations direct the description as well as the explanation of the reactions of infants. These stereotyped perceptions and expectations also define and differentiate quantitatively and qualitatively the confrontation and interaction of parents and children. Research indicates that male babies are held more (Moss, 1967) and played with more roughly, with more physical jostling and playfulness than female babies by both parents. Girls are handled more gently, delicately and are perceived as more vulnerable by both parents

Daughters and Sons

STURDY HANDSOME, BIG r TOUGH....

DAINTY DELICATE SWEET r CHARMING...

Source : Statham, 1986, 32
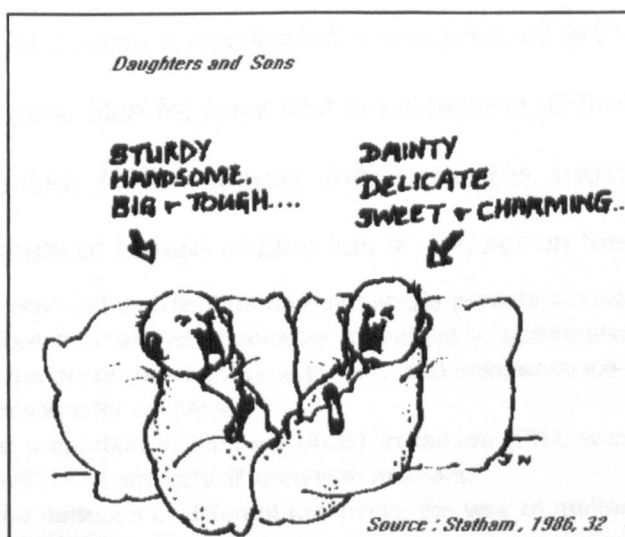
(Frieze et al., 1978). It has been found that six months after the birth, parents talk more to girls and in particular in a peaceful manner and sweet tone of voice (Lewis, 1972a). They hold them in their arms and play with them more frequently (Minton, Kagan & Levine, 1971; Fagot, 1974). Several studies show that parents are extremely upset by any sign that their boys are *"sissies"* while girls are encouraged to be obedient and *"feminine"* in both behaviour and dress (Fling & Manosevitz, 1972).

We do not know if these differences are due to real differences between babies or if they are created by the impact of expectations of parents. Adults often confirm that the differences between boys and girls are inherent; however studies that have been carried out on babies show subtle differences in the way they cry, eat, or in their need to be near their mother. Maccoby and Jacklin (1974) after having studied the results of two hundred more or less relative studies in order to find if the contention that the manner and the duration of interaction and generally the encouragement or the discouragement of different patterns of behaviour, attitudes, abilities in the two sexes by parents is provable or not empirically, came to the conclusion that very little probative evidence has been found to support it. The stability and validity of these findings are disputable.[1]

Differentiation in the behaviour of parents is manifested and expressed with a different colour of clothes; pink for girls, blue for boys that is followed in all the personal articles of the child. Chafetz (1974) argues that even the initial association of different colours with male or female babies has an impact on the

a. Most of the research looked at by Maccoby and Jacklin, has had as sample parents whose children were below six years old, therefore it is almost impossible to except a systematic differentiation of boys and girls as regards the encouragement of autonomy and independence-aggressiveness, in the motives and in the pressure for success.
b. The sample of research was in a great proportion of mothers (49%) to fathers (9%), who according to researchers behave and deal with boys and girls differently to mothers.
c. Research was not homogenous as for the definition of different meanings, the way of matter selection, statistical elaboration etc. (Bloch, 1978, 35)

ways in which parents and others act towards babies on the basis of their sex.

Even the decoration of the child's room can follow the same general rules (Rheingold & Cook,1975). Very early on their development boys and girls experience different environments which influence the development of specific abilities and activities.

The way of dressing differentiates boys from girls: trousers for boys, dresses for girls. Outsiders, the only group of people who could be in ignorance of the sex of the child and therefore might interact neutrally or as though the child were of the opposite sex, are notified of the sex of the child by its clothes. So, their interactions will probably be added to these of the family and of friends to encourage traditional stereotypes (Hartley, 1966; Shakin, Skakin & Sternglanz, 1985). Labelling as regards boys seems to be stricter than that of girls because we notice that boys' clothing never includes dresses (Pomerleau, 1990). Even the way girls are dressed conveys indirect messages in relation to appropriate and expect codes of behaviour. Dresses with laces and frills prevent the freedom of movements of girls, preventing their choice of activities with the consequence of transferring the idea that certain activities are not appropriate for girls (Norman et al., 1987).

Another process of differentiation is the content and the style of language that parents use. Parents distinguish words and phrases they use to praise or to criticize their children. They speak more politely to girls and reprimand boys more frequently (Sharpe, 1976). Girls are bombarded with terms such as *"honey"*, *"sweetie"*, *"darling"*, *"treasure"*, whereas boys get terms that reinforce the tough behaviour expected of them.

Even the subtle ways that parents communicate with their children can reinforce gender roles. Girls are interrupted, for instance, by their parents, when

they talk, twice as often as boys are. Since interruptions provide a fairly clear index of relative power and importance, it is likely that daughters who are interrupted more often, therefore learn that their opinions are less worthy of serious attention (Zimmerman & West, 1979; Greif, 1980).

Another index of differentiation is the names given to children. Names are usually given to babies by their parents soon after birth and therefore we are able to recognise the sex of the infants from the very beginning of their lives. In Greek society, for example, the first male child is named after his grandfather, if it is a boy, from his father's family, and the second if it is a girl, is named after her grandmother from her father's family too. So the chance to be named after its grandparents from her/his mother's family is only given to a third child. Very often parents use forenames for children which follow the sex stereotypes. So girls are named with melodic and pretty names. A study by Betty Phillips (1990) indicated that male nicknames are correlated with strength, largeness, hardness and maturity. For female nicknames, physical attributes are more important and connotations are typically of beauty, pleasantness, kindness and goodness.

The ways in which parents discipline their children differ for each sex. Boys are punished more frequently and accept more physical punishment and girls more often suffer the withdrawal of parental love and affection. The psychological results of the lack of love are more profound and last longer. If girls are punished more strictly in that way, it is natural that this will develop their need for affectionate relationships. Even children who are punished in this way are less aggressive than those who get physical punishment (Sharpe, 1976).

Concerning aggressiveness, a lot of things have been said about the innate tendency of boys as regards the manifestation of aggressive behaviour (Maccoby & Jacklin, 1974; Tieger, 1980; Hyde, 1984; Tutchell, 1983). Parents

show annoyance when girls hit another child but boys are allowed to be aggressive and at times they are encouraged to return the blow. Although a girl is simply expected to be more passive than a boy, it seems that boys are under a more powerful pressure to act as men.

Girls in general receive more affection, protection, control and more intense confinement. Concerning girls, compliance and willingness to please are clearly valued traits. Girls are also held on a tighter rein, a fact that makes their activities more susceptible to observation and sanction (Epstein, 1973). Girls may not be specifically encouraged to be passive but the relative lack of encouragement or lack of opportunities for independence and autonomy results in the same thing (Fagot, 1974; Fagot, 1978; Kramer, 1988). In one long-term study girls with very protective mothers were found to develop more feminine interests during childhood and adulthood. "Overprotection" has also been found to have a "feminizing" influence on boys' personalities (Kagan & Moss, 1962).

Block (1978) summarized several areas where parents gave different patterns of responses to boys and girls. Both parents emphasized achievement and competition for boys, encouraged sons to control their emotions, were more concerned about punishment orientation, and emphasized independence more for boys.

Even parents who do not wish to treat their children differently may affect sex role stereotypes by subtle difference in the treatment of boys and girls. When they say the boy must protect his sister both he and she learn that she must be protected and only he can provide this protection.

In addition the acceptance of the segregation of the sexes within the home, in activities and responsibilities can provide the background for different status. The roles of husband and wife within the family are significant in providing role

models because children learn gender roles not only through their parents' efforts but through their indirect influence as models.

"Mother is in charge of and servant to father, home and children. She washes his clothes, cooks his meals, serves at dinner, cleans his house, and raises his children. She is economically dependent upon him. Depending upon the view of the particular father, her activities may or may not be perceived as having value. It is father who is head of the household and supports the family and from whom the family derives their social status and style of life".   (Demark, 1974, 20)

Children believe that what they observe in their own home is true for everybody. They make inferences from the information available to them. They learn to fit themselves to sex-appropriate patterns and they start to generalise. The different parental treatment of boys and girls is predicated to be one important component of sex role stereotypes. Even though parents are not the only source of differential socialisation, since other agents may serve a similar function, their role is fundamental in the socialisation process.

3.1.1. The Father's Role

The traditional role of the mother and the effects of maternal behaviour on children have been studied extensively. Only recently has research focused on paternal behaviour. In most families children have qualitatively different types of relationship with each parent. Mothers and fathers have a separate contribution to the acquisition of sex-typed behaviour by young children. It is difficult to say what effect such differences have upon the growing infant.

Recent evidence indicates that mothers and fathers handle their children in different ways. Although the father is an important figure for the child to model or imitate, his role is secondary to the mother's role.

"Fatherhood is a marginal role because men see themselves as first of all bread winners. Nevertheless, society holds certain expectations about paternal behavior, and the father is rewarded if he satisfies them and punished if he does not".   (Duberman, 1975, 68)

Our culture emphasizes the different role of fathers by keeping men away from their children. Most fathers therefore have less opportunity than mothers to keep up with the development of their children. But even when both parents work and are available to spend equal time with their baby, the mother does more care-giving (Lamb, 1975; Belsky, 1979). Studies showed that while nearly all men play with their child regularly, few involve themselves in child care on a daily basis, particularly the dirty jobs (Ban & Lewis, 1974; Kotelchuck, 1976; Clarke-Stewart, 1978).

"One overriding biological event may well contribute to a mother's connectedness to her infant and to a father's distance. Only mothers have the experience of pregnancy on which to pattern a sense of continuity with their baby. The new father has been a bystander to his wife's gestation and labour, and some men complain that they feel like bystanders after the baby is born, too. The father feels that he does not really know how to deal with diapers and burping, or he doesn't like baby noises, messes, and smells, or the baby is still too"fragile" for a man to handle comfortably".

(Stein, 1983, 64)

Considering the differential treatment infants receive from their two parents, it is understandable that the type and the quality of the interaction also differ. The mother's role is more likely to involve physical caregiving, while the father's role involves fun and games and a link to the outside world (Lamb, 1975, 1977b; Lewis & Weinraub, 1979).

Fathers are more likely to get involved in rough and tumble play with younger children (Parke, 1979) and their styles of interaction are less smoothly moulded than those of mothers. Such behavioural differences, it is possible, influence the development of the child's social understanding.

Fathers' behaviour is not only different in relation to mothers' but they also treat boys and girls in different ways. Very early in a child's life, fathers show sex - preferential behaviour towards sons and daughters. From the age of about nine months, fathers are more often concerned about the safety and well being of their daughters than of their sons (Pederson & Robson, 1969). The perception of girls as fragile and weak is based not only on their physiology but on perceived ideas of what a girl ought to be.

Other studies which have examined the differential treatment of infants by fathers (Snow, Jacklin & Maccoby, 1983), and the rewards and punishments of parents (Langlois & Downs, 1980) show that fathers have different type of behaviour towards boys and girls. Baumrind & Black (1967) have reported that fathers were more likely to punish boys than girls but were more likely to encourage dependency in girls than boys. Probably because they feel that they have to curb their sons, fathers are more authoritarian towards them than towards their daughters (Safilios-Rothschild, 1986, 35).

In general fathers seem to be the ones who hold more definite opinions about sex role stereotypes. Beverly Fagot (1974) observed toddlers and compiled a list of 38 different types of behaviour. She presented the list to mothers and fathers of two-year-olds asking them to categorise the behaviour into 'masculine' and 'feminine'. She found that fathers were more certain in their ratings than mothers. Since fathers to be absent from home to a much greater extent than mothers they are perhaps more likely to respond to cultural stereotypes, to what

they think should be, while mothers may base their judgement on the actual behaviour they observe. Fathers appear to encourage sex differences more than mothers, playing a key role in sex role differentiation. In spite of his infrequent presence the father is an important figure for the child to model or imitate.

3.1.2. Children's Play

Very large differentiation in the behaviour of parents is shown as regards children's toys. Toys are the tools that children use to rehearse life. As we have seen, traditionally boys have been encouraged to create a fantasy world of power in the community. Girls have been restricted to recreate the home environment in their play. The choice of toys follows parents' stereotyped perceptions and prepares children for the different roles which they will perform as adults.

As we discussed earlier, there is a differentiation in the choice of toys as well as in the style of playing between boys and girls. Children, as young as 18 months of age, have sex - stereotyped toy preferences (DiLeo et al.,1979; Fagot, 1984; Miller,1987; Caldera et al., 1989). During the preschool years, between the ages of 3-5 boys prefer physical activities such as climbing, playing with large vehicles and playing in the sand or dirt (Weinramb et al., 1984). Boys use more space and play outdoors more often. They are more aggressive and prefer rough and tumble play (Di Pietro, 1981). They prefer masculine roles and costumes. Girls play with domestic objects. They prefer to sing, sew, slide, swing and to dress up. They enjoy feminine roles and costumes (Maccoby & Jacklin, 1974; Fagot, 1977; Smith & Conolly, 1980; Giddings & Halverson, 1981; Pomerleau et al., 1990).

For girls there is a wider variety of tiny objects that imitate home equipment and an endless range of dolls with their dowry.

"The importance of dolls to child rearing is in the enormous variety of activities and behavior that they elicit from a child. They represent the varied relationships that can be established with people, as motivated by the different types of dolls..."   (Jenkins & MacDonald, 1979, 52)

But a doll was always regarded as a girl's toy that seals the woman's doual role of mother and housewife. If a boy touches a doll, it is improper and yet it is the only toy in human form and through which a child can gain confidence and can channel love and tenderness for human beings. However, a taboo envelops it.

The toys a boy normally plays with are entirely different: vehicles, aeroplanes, sports equipment and war games. In children's toys and in the way they use their toys, the reproduction of the social reality in which they live is obvious. Boys are sealed with war toys by the stamp of preconstruction of what is male, aggressive and brave. In this way different toys as well as the activities which are connected to them, function as symbols in the course of socialisation (Kantartzi, 1988, 84).

The list in Table 1 (Oakley, 1972, 53) shows that the boys' choices are for toys symbolising physical and
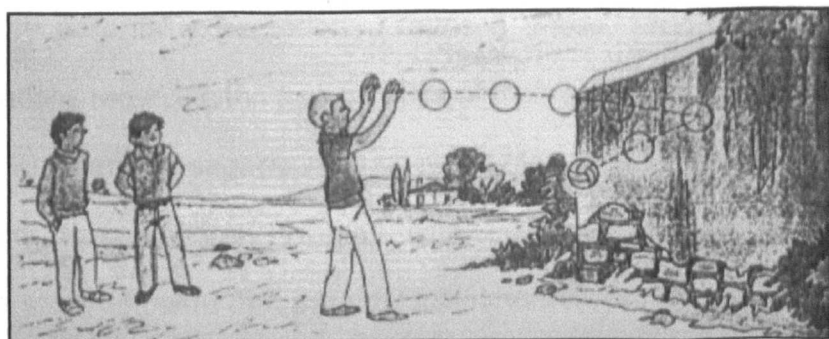
Illustration from 6th Year Science Textbooks, 1990, 154.
Balls are for boys.

mechanical activity and the world outside the home, those of girls for toys of the domestic interior, reflecting domesticity, nurturing and aesthetic adornment.

Table 1. Sex preferences in toys. The ratings run from 1 (strongly masculine) through 5 (appropriate for both sexes) to 9 (strongly feminine).

toy	rating
wheelbarrow	3.2
cleaning set	8.4
plane	1.7
sports car	3.6
teddy bear	5.8
rocking horse	4.6
skipping rope	7.0
dish cabinet	8.3
football	1.5
construction set	2.7
tool set	2.0
sewing machine	8.2
dumpertruck	2.5
banjo	4.5
cosmetics	8.8
doll's pram	8.5
telephone	5.6
racing car	2.2
alphabet ball	4.9
roller skates	5.3
paddling pool	5.0
tractor	3.0
doll's wardrobe	8.7

One explanation for early sex - typed play is that children's toy choices are influenced indirectly by parents' expectations (Tavris & Wade, 1984). Parents have different expectations regarding the personalities of their sons and daughters and predict that their children will engage in sex - typed play.

Parents expect their children to play with culturally defined sex - appropriate toys. One study showed that parents' initial non-verbal responses to the toys, were more positive when the toys were stereotyped for the child's and parents' gender than when they were not (Caldera, Huston & O'Brien, 1989).

Fagot (1978) found that parents react significantly more favourably to the child when the child was engaged in same sex preferred behaviour and were likely to give negative responses to cross-sex preferred behaviour. Miller (1987) asked

college students to rate 50 toys according to characteristics including sex appropriateness. Most of the toys on the list were rated as sex typed, with only nine toys rated as appropriate for either sex. Similar findings were shown in the research by Fisher- Thompson (1990).

Parents may also directly influence their children's choices in toys. Children's rooms are typically filled with sex-typed decorations and toys. Rheingold and Cook (1975) found that boys' rooms of boys contained more
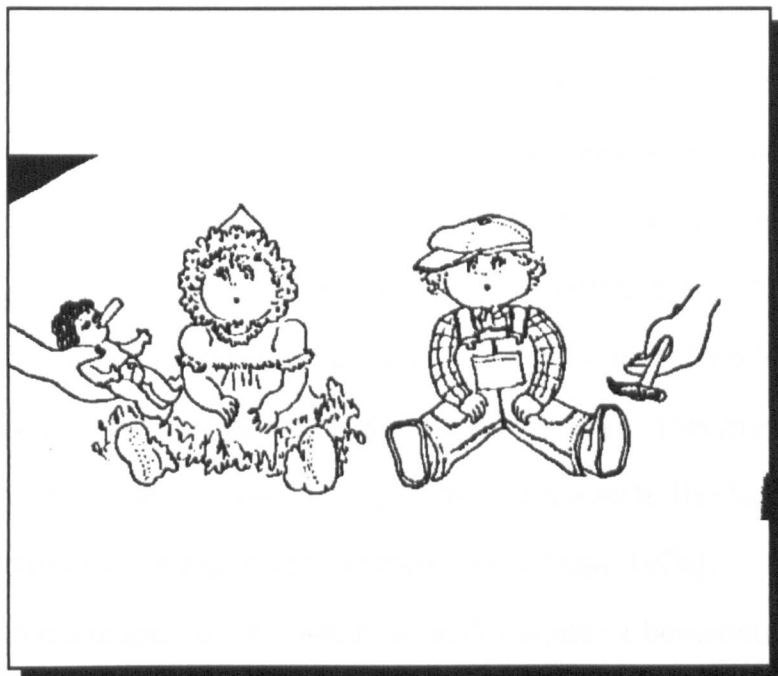
Toys for boys and girls.Source: Sjoberg 1982, 55

vehicles, more toys related to the physical properties of matter, more educational and art material, more sports equipment and more toy animals. More of their rooms contained toy depots, machines and military toys. The dolls in boys' rooms were more often male dolls -cowboys, Indians and toy soldiers. Girls' rooms in contrast, contained more dolls in all, especially more female and baby dolls. Their rooms also contained more objects for the care of dolls and the home. O'Brien and Huston (1985a), as part of a study of play behaviour of toddlers in a day care centre, observed that among 22 children, boys possessed more masculine toys and girls more feminine ones.

It would appear obvious that when Christmas or birthdays approach, parents are likely to buy dolls for girls, and to buy trucks and trains for boys (Robinson & Morris, 1986). Bradbart (1985) reported that 9-16 month-old boys received vehicles and spatial-temporal toys as Christmas gifts, while girls received domestic items.

In thirty hours of Christmas shopping observation in a toy department no field worker reported a single scientific toy bought for a girl. The observers found that adults spent more time choosing toys for boys than they did choosing toys for girls. The researchers also found a price difference. Of toys costing under two dollars, 50 per cent were for girls and 31 per cent for boys, while of toys costing over five dollars only 18 per cent were for girls and 34 per cent for boys. This may be due to differences in attitudes about boys' and girls' toys and also to the fact that a greater variety of boys' toys were on the shelves (Goodman, 1974).

Toys and activities have properties that elicit particular types of behaviour in children. Play with sex-typed toys may be the source of some observed behavioural sex differences. For instance masculine toys such as trucks and adventure figures, promote motor activity (Liss, 1983b). Play with dolls fosters nurturing instincts, social proximity, and role play (Liss, 1983a, 1983b; Fisher-Thompson, 1990).

Girls' toys are oriented towards domestic activities. They do not encourage manipulation, construction, or movement through space. Boys have a tendency to play with toys that may promote the development of spatial ability skill, e.g. lego blocks, various vehicles, car, ship and aeroplane models. These kinds of toys provide users with concrete experiences in the manipulation of objects and patterns, construction, and movement through space (Mitchell, 1973).

Dyanne Tracy's study (1987) examined the possible relationships among children's toy playing habits, spatial abilities and their science and mathematics achievements. The results indicated that males and children who maintain a masculine sex role orientation tend to play with a wider variety of toys and maintain greater science and mathematics achievement scores than females and children with feminine sex role orientations (See chapters 11 & 12).

Serbin and Connor (1979) found that children who played primarily with masculine toys scored higher on measures of visual-spatial ability than children who preferred feminine toys, and children who preferred feminine toys had higher vocabulary scores than children who preferred masculine toys. Whether children chose toys because they were able to use their good visual-spatial ability (and the toys just happened to be masculine) or whether they chose to play with masculine toys which in turn enhanced their visual-spatial skills, is unclear.

Observers seem to agree about the type of stereotyping that exists in children' s play, but it does not seem to be clear what the explanation is for this. Psychoanalyst Erik Erikson (1975) explains the difference in play between boys and girls as a function of their anatomy. Erikson (1975,219) observed that girls at play emphasize inner space, while boys stress outer space. Girls create interior scenes because of their own inner space, their wombs, he says.

Toys are the tools of childhood and the adults should present children with all the choices and let them choose according to personality and not according to their sex.

3.2. Peer Groups

Peer groups seem to be important in the formation of sex role stereotypes before school and during school years. A peer, in the common social sense of the word, is a person whom one meets on terms of approximate equality, a companion or fellow. For children it means other children relatively of the same age, in certain instances of the same sex, with whom they can associate on terms of equal status, at least as far as their elders are concerned (Bossard & Stoker Boll, 1966, 386). For social psychologists there must be four factors when they talk about peer groups:

"Peer group is a confederation that (1) interacts on a regular basis, (2) defines a sense of belonging, (3) shares implicit or explicit norms that specify how members are supposed to behave, and (4) develops a structure or hierarchal organisation that enables the membership to work together toward the accomplishment of mutual goals".

(Shaffer, 1985, 681)

The peer group is the child's own social world, with its own language, its own mode of interaction, its own values and acceptable forms of behaviour, many of which adults cannot understand.

Chronologically, peer groups take form early in the child's life. The exact time varies, both with the nature of the family situation and the availability of age-mates. However, the process of moving away from the small world of the family is usually before the fourth year. In the earliest years, these peer groups are relatively informal such as play groups, cliques and gangs.

Peer group behaviour begins when children unmonitored by adults, are permitted to interact freely with their fellows. Initially, a substantial proportion of their contacts with peers are rather closely supervised, and even later when they are largely left on their own, much peer activity still occurs under the overall supervision of adults (Ausubel et al., 1980, 225). The interaction that a child has with its parents and older siblings cannot be considered as being one between equals; usually children are placed in a subordinate position by an older member of the family who is trying to teach them something, issuing an order, or otherwise overseeing their activities. In contrast, associating with peers helps children to try their power, to be recognized, to play differentiated roles and to express their own ideas (Shaffer, 1985, 673).

The play group is the most informal of the peer groupings and also the earliest in the child's life to develop. Somewhere between the third and fourth year children prefer to play in groups. Play groups operate chiefly in schools and at neighbourhood centres (Bossard & Stoker Boll, 1966, 403).

Children play more often with same sex companions and this like-sex bias become increasingly apparent with age (Langlois, Gottfried & Seay,1973; Serbin, Tonich & Sternglanz, 1977; Goldman,1981). Lockheed (1985) shows in her review of the research on sex segregation that male-female separation is common in playmate choices, voluntary seating arrangements or helping behaviour.

The fact that infants and toddlers play more often with children of their own sex probably reflects their parents' idea that boys should be playing with boys and girls with girls. As children acquire gender stereotypes and sex-typed interests it is not surprising that they should begin to choose same-sex playmates who enjoy the same kind of activities that they do (Shaffer, 1985, 675). The absence of substantial cross-sex interaction is likely to persist in the development of sex role

stereotypes and gender inequities. If males limit their interaction to other males they are not likely to develop the abilities and interests of females and vice versa.

While there is consistent evidence demonstrating that same-sex interactions are more common than opposite-sex interactions in same-age settings (Serbin, Tonick & Sternglanz, 1977; Goldman, 1981; Roopnarine,1984), there is evidence that age is also a salient factor in playmate selection.

When the child has reached the age 8 to 12, peer groups become more stable and more significant to the child. During the primary school years a child becomes more connected to peers and moves away from parents. As time goes on peer groups develop in size, complexity of organisation, and freedom from adult supervision. Girls usually create groups of two or three persons while boys' groups have more members. It should be mentioned that the ideology and culture of the peer group seem to have important influence on boys and to be less significant to girls. The boy may take a considerable part of his male concept from his father, but then practises this concept with his peers rather than with his parents (Nash, 1978, 365).

Conformity to peers increases with age. The older the children are, the more likely they are to ignore the advice of parents and endorse the opinions of the peer group. Adolescence is the period when the peer group has its greatest influence.

The peer group may be considered a medium position between home and the wider community. The peer culture plays a critical role in the social development of the child in providing a medium in which the child can practise the social skills. The peer group, like family and school, is an important socialising and training institution. Children acquire approved forms of sociability, self-assertion, competition and cooperation. Children's social behaviour is strengthened,

maintained, or virtually eliminated by the favourable or unfavourable reactions that they elicit from peers.

"For two important reasons the peer group demands a certain degree of minimal conformity from its members. First, no institution, especially if it has status- giving functions, can exist for any length of time without uniform, regular and predictable adherence by its members to a set of avowed rules and traditions...Second, conformity is also required to maintain the group solidarity that is necessary to offer effective and organized resistance to the encroachments of adult authority".

(Ausubel et al., 1980, 243)

It is clear that children serve as socialisers for one another in that both same-sex and opposite-sex peers tend to reward "sex-appropriate" play behaviour more than "sex-inappropriate" or opposite-sex behaviour. The peers can become effective agents of reinforcement. Eisenberg et al. (1989) found that girls who interacted frequently with other girls were higher than their female peers in feminine toy use, while frequency of interaction with boys was positively related to masculine toy play.

Connor and Serbin (1977) noted a relationship between both (a) preschoolers' opposite-sex peer interactions and sex-inappropriate play behaviour, and (b) preschoolers' opposite-sex peer interactions and sex-inappropriate play behaviour. Lamb et al. (1980) in some research hoped to find out more about this by carefully observing how three to four year-olds reacted when playmates engaged in sex-appropriate or sex-inappropriate activities. They found that children generally reinforced their companions for sex-appropriate play and were quick to criticise or disrupt a playmate's cross sex activities.

In their research Eisenberg, Tryon and Cameron propose:

"..., the sex of a playmate prior to a child's contact with a toy may influence his or her approach to that particular toy. This instance in probability could occur either because the child is more likely to initiate same-sex play in the presence of a same-sex peer, or because a same-sex peer frequently initiates or 'leads" a child into same-sex toy interaction.

(Eisenberg, Tryon & Cameron, 1984, 1045)

Participation in a peer group has a similar respective impact on the school attainment and involvement of boys. For example if a boy has a friend who works hard and respects the teacher's values it is very possible that he should go along with this attitude too. Adherence to peer group norms, if they are anti-school, will be stronger than any other pressure school can exert (Hargreaves, 1967).

Group influence appears to depend upon the extent to which children are involved in a group, upon the norms of the group and upon their own personality. Herriot (1963) found that the expectations of best friends accounted for more of the variation in children's aspirations than even the expectations of their parents.

3.3. School

In this chapter we will study generally the school as a medium of socialisation. The books and particularly the schoolbooks in which we are interested, will be examined in a following chapter. One of the most important factors in socialisation and development of sex role stereotypes is school. Apart from school textbooks which are instrumental in the formation of sex role stereotypes there are also some other factors which act in school. The school is one of the prime agencies of sex-differentiation. It offers models of adult roles and possible lifestyles. It teaches attitudes and expectations for girls and for boys through the organisation and content of its curricula and through the nature of teacher-pupil relationships. Sex role socialisation begins in the family, and school continues the process playing a part in contrasting gender through its organisation.

In many ways the classroom is the reflection of society. The pervasive quality of sex role stereotypes and expectations in our society guarantees their presence in the classroom. Teachers and students alike bring into the classroom their own perceptions, attitudes, values and behaviour, some of which are based on stereotypical notions about the roles of men and women, and boys and girls in our society (O'Brien, 1988,111).

Education is seen as reproducing not only the technical and intellectual skills required to maintain production but also the beliefs and values necessary to maintain the social structure fitting the particular form of production which obtains. With its contemporary form school is an especially ideological mechanism. The ideological messages always corresponding to the interests of each time, find their widest and most effective dissemination in school. The most influential

reproduction theorists, Althusser, Bowles and Gintis say that education plays a central, if not critical, role in the reproduction of a capitalist mode of production. Althusser (1972) sees education as an "ideological state apparatus" which inculcates the necessary means and beliefs into the rising generation in order to continue to reproduce the existing social order. In essence, the children of the working and ruling classes are equipped, through their different educational experiences, to believe in the appropriateness of their class positions, and to behave accordingly. Bourdieu and Passeron (1977) develop a theory along broadly similar lines to Althusser's.

Pupils on the other hand, come to school with varying degrees of sex role stereotypes acquired at home, from the media, and from peers, and through school all these other influences continue to impinge on children's beliefs and attitudes and either reinforce sex role messages received from school, or tend to neutralise them.

3.3.1. Curriculum

What each society offers in the way of education to its children directly expresses the level of its civilization and forms an objective and measurable criterion for the evaluation of the quality of that level. The most essential work of education is the transmission of knowledge. The school's curriculum is knowledge organised according to social procedures. The development of the curriculum in a school is usually directed by the general orientation of the educational system, in accordance with which is also the form of the educational process. The curriculum defines and limits exactly the knowledge which is to be transmitted to children exactly and specifies the official policy of education (Kantartzi, 1987, 100).

"The formal curriculum relates to the ideas, values, skills and information imparted through the syllabus within timetable projects and formally organised learning. Subject content and presentation, teachers' attitudes and pupils' perceptions all affect what pupils learn within the formal curriculum and can make learning experience more attractive or more relevant to boys than girls, or vice versa".   (National Union of Teachers, 1989, 11)

What exactly constitutes the curriculum of a school is the subject of some controversy. A broader definition is used by some educationalists who conceptualize the curriculum as all the learning which is planned or guided by the school, whether it is carried out in groups or individually inside or outside the school (Deem, 1978, 41). Lawton (1975, 6) extends the definition of the curriculum still further, by arguing that it is "essentially a selection from the culture of a society" which is precisely the point which theorists like Bourdieu make about educational institutions when they contend that these institutions transmit the dominant culture of a society.

The official curriculum and official guidelines in most countries presume that girls and boys will do the same subjects. However, practice often shows the official curriculum to be more sex-typed. Analysis of the content of the curriculum, in terms of syllabuses, textbooks, worksheets, exam papers, and other written materials and of the spoken academic content of lessons shows that there is a great deal of implicit and explicit sexism.

Sexism is rather obvious in a school curriculum in a number of ways: division of subjects into male and female; it is found in the content of some disciplines, which emphasize male rather than female endeavour, or which take for granted the existing position of women in society; and it is found in the orientation of subjects towards boys or girls (Deem, 1978, 46)

Much research has been done on how gender stereotypes are transmitted overtly and covertly through the curriculum. This can happen in two ways. First, boys and girls may do the same subject, but be taught it separately. Second, they may do different subjects. Among the factors that influence pupils' perceptions of subject areas are whether men or women teach and how subjects are portrayed in textbooks. The results are that subjects are stereotyped in particular ways.

Some schools have a sex-segregated curriculum but in most primary schools the curriculum is the same for both sexes. It is usually only the craft and game areas in which children may be offered different experiences.

Physics, chemistry and mathematics are considered masculine by pupils. Measor and Siker (1992) and Kelly et al. (1982) demonstrate how girls are afraid of handling equipment and conducting experiments, while boys are enthusiastic about such activities and identify with scientific work, which, it is argued, embodies a masculine view of the world.

"Different teachers will interpret materials in varying ways and the students receive numerous messages from the teacher; they can make many assessments about the nature of a subject by virtues of the sex of the teacher. When science is taught almost exclusively by males then messages about sex and science are conveyed to the students. Students are often aware that women teachers are concentrated in certain areas of the curriculum. They note the arts-science dichotomy, especially in the upper half of secondary schools, and some may even feel that men do the more "complicated" subjects. If there are no women teaching "hard" or abstract sciences, like chemistry and physics or mathematics or technical drawing, then this reinforces other messages that teach the girls concerning the appropriateness or possibility of their succeeding in those areas. On the other hand, cookery and needlework are "obviously" girls' subjects. The teachers are almost invariably women and in any case these practical skills are part of the home environment of girls (and not boys), unlike science.   (Scott, 1980, 104)

Furthermore, although other subjects have a neutral content, they are taught in a very sexist way with girls being encouraged not to take them, because they are masculine subjects. For example, physics and chemistry, are supposed to be masculine domains, which require skills that girls do not have and instead of training girls they continue discouraging and disorientating them towards other fields (Deem, 1978, 43).

The official curriculum in itself is not enough to eliminate sex bias. Social pressures have created the idea that some subjects are girls' subjects and some are boys' subjects. Even in educational systems which most explicitly assert equality it is difficult to counterbalance such influences.

3.3.2. The Hidden Curriculum

Apart from the official curriculum, there acts and functions another unofficial curriculum which is not taught but it is learnt through unofficial forms of teaching. This unofficial curriculum, known as the hidden curriculum, seems to be responsible, to a great degree, for the function of social control, that is for social and political reproduction through the transmission of values, attitudes and beliefs to the students. This reproduction has also succeeded by accustoming people to the acceptance of manners and types of social organisation which basically serve the ruling class and contribute decisively to the reproduction of their social ideology (Kantartzi, 1992a, 108).

The hidden curriculum, then describes the way in which schools transmit beliefs, values and attitudes to pupils outside the formal curriculum. Unlike the formal curriculum, the hidden curriculum is not deliberately planned or intended. This makes its impact all the stronger, as teachers and pupils being unaware, participate and convey ideas and beliefs through the everyday life of the school. To determine the hidden curriculum is the first and most important step in facing

the problem of sexism in education and a crucial step forward in tackling the issue of sexism in education (National Union of Teachers, 1989, 12).

Jackson (1968, 56) argues that the hidden curriculum communicates similar messages to all children. They all have to learn to comply with three "Rs": Rules, Routine and Regulations, in order to cope with school. Frazier and Sadker (1975) argue that the hidden curriculum is not the same for all children. They argue that the hidden curriculum in schools is sex differentiated and that what is communicated to the pupils is what types of behaviour, attitudes and prestige are appropriate for each of the sexes. Because both explicit and hidden curricula exist in schools, one has to investigate both for evidence of sex role stereotyping. It is possible, as far as official subjects are concerned, that no sex differences may exist in a particular school, but that messages about what is correct behaviour for the sexes are being communicated via the content of textbooks, the teachers' interactions and prohibitions, and the pupils' observations of female and male teachers and the staff hierarchy (Lobban, 1978, 53).

Since the hidden curriculum is implicit and very often implemented unconsciously, may be more resistant to change than the official curriculum. It is also argued that the hidden curriculum is more influential in shaping pupils' attitudes. We can find four aspects of the hidden curriculum; sex distribution in the staff hierarchy, curricular materials, teachers' attitudes to sex roles and teachers' behaviour to each of the sexes in teacher-pupil interactions in the classrooms.

However, placed within a wider context than just the classroom the hidden curriculum becomes one of the many ways society covertly transmits its values. The hidden curriculum is supported not just by teachers' attitudes but the attitudes of children, their parents, and, in a less direct but equally powerful way, the whole of society. Teachers are the products of the school's hidden curriculum as well as

unwitting agents of it (Cole, 1989, 104).

3.3.2.1. Teacher - Pupil Interaction

Socialisation is perpetuated by teachers behaviour which is one of the most powerful influences on children's learning in schools. Teachers play a critical role in the transmission of sex role stereotypes, not only through the content of what they teach, but also through their behaviour in the classroom, their interactions with pupils, and in their assumptions about the different skills and abilities that girls and boys possess.

Teachers' attitudes are almost certainly the dominant influence on how children develop in school. They may well be more accountable than they realize for the persistence of different interests, activities and levels of achievement in girls and boys. Statistical research indicates that more than 1000 interactions are performed during a day between students and teachers. This statistic is not meant to overwhelm, but it shows that the interactions are so frequent, that is hard to have the time to examine what is happening (O'Brien, 1988, 114).

While teachers are not usually aware that they treat boys and girls differently a number of studies have clearly indicated sex differences in teachers' behaviour. Many research studies have suggested that teachers' assumptions and actions about pupils on the basis of class and race affect their performance and achievement. The classic Rosenthal and Jacobson study (1968), which showed how much experimentally manipulated teacher expectations for pupil progress can affect pupils' intellectual growth, makes it clear that teacher expectations are a force to be reckoned with. Expectations can be shown in many ways: through the subtle application of touch, facial expression, eye contact, vocal tone and gesture, teachers convey an array of messages about the pupil's place in the classroom and in life, whether they intend to or not. Children learn to respond in

the way that seems to be expected of them (Measor & Siker, 1992, 62).

Teachers make different assumptions about a pupil's poor performance, depending on whether it is a boy or a girl. In one study teachers attributed boys' failures to *"lack of motivation"* eight times more often than they did for girls. One consequence is that boys are less discouraged by failure; they are told that what they need to do is pay attention or try harder next time. It is an excuse not made available to girls, and may lead them in the long term to avoid challenge or risk-taking for fear of being shown up as a "dim-wit" (Whyte, 1983, 39).

A number of studies of teacher-pupil interactions showed that pre-school and primary teachers interacted more with the boys in class than with the girls and this is true of both positive and negative contact (Spaulding, 1963; Brophy and Good, 1970; Martin, 1972; Good et al., 1973; Ricks & Pyke, 1973; Leinhardt et al., 1979; Serbin, 1985).

Teachers chatted socially to girls more than to boys, but their interactions with boys are more likely to have a cognitive result. The main reason for this pattern of interaction is the boys' potential for disruption. Teachers believe that boys are more likely to cause a disturbance if they do not receive attention and monitoring. It seems that teachers fear the disruption that bored and disaffected boys can cause in a class, so in order to preserve an atmosphere in class which is quiet and thus conducive to learning they are obliged to devote more time to boys (Measor & Siker, 1992, 64).

Detailed observation of the criticisms and praise directed by teachers towards boys and girls has shown that of the many criticisms directed towards boys, only one-third were related to the intellectual quality of their work, as opposed to two-thirds of the negative evaluations addressed to girls. With expressions of praise, 94 % of those addressed to boys, but only 79% to girls,

referred to the intellectual quality of their work (Safilios-Rothschild, 1986, 41). Even when the teacher or the subject change, girls are more likely to be still affected by criticism received earlier by teachers, and this develops low achievement expectations. Brophy and Good (1970) reported that boys were praised more frequently than girls after giving the correct answer. Boys were also criticised more often for incorrect responses or for failing to respond, which suggested boys were placed under greater pressure to succeed. Many teachers believe that public evaluation does not help girls in working toward academic goals but is facilitating for boys.

A study by Barnes (1988) examined teachers' comments on student papers. The results showed that male teachers tend to be generally intolerant of emotional writing but even more critical when the author is female. Female teachers tend to be more fastidious about the language and mechanics and more concerned about the form of an essay.

Research by Davaris-Katsoufis (1985) in Greek secondary schools indicates that girls occupy a peripheral place in the classroom. The marginality of girls' participation in the classroom is reinforced through teaching practices which are based on teachers' perception, attitudes and expectations of their students as sex subjects. There was a greater tendency for male teachers to group boys with boys and girls with girls. Teachers expected male students to achieve more academically studies than their more able female classmates. Boys were predominant in classroom participation and also monopolized classroom activity by disruptive behaviour. Teachers lavished positive attention on them as the best students.

Teachers have also been observed showing boys how to go about an activity then letting them *"do it"* on their own, while the teacher *"does it"* for the

girls (Safilios-Rothchild, 1986, 37).

"Teachers instruct male students in performing a task, but they often do the task for female students. Teachers allow more opportunities for boys to respond, to answer questions, engage in activities, give opinions, help etc. The result is a classroom in which boys dominate. They talk more, interact more, receive more teacher time and have more opportunities to learn. Boys also have more opportunities to build self-esteem because they speak more and are more often praised and told that they have ability".   (Shakeshaft, 1986b, 501)

Clarricoates identifies the fact that teachers see girls as being more prepared to conform. In this study, teachers thought that boys were brighter and more academically capable. Even though girls had the highest marks right through the primary school that she studied, Clarricoates observed that teachers thought that boys were the brightest.

"Although the girls tend to be good at most things, in the end you find it's going to be a boy who's your most brilliant pupil".   (Clarricoates, 1980, 33)

It seems that teachers do have different expectations of boys and girls and the suggestion is that this affects the pupils' performance.

Expectations, however, are not the only issue. The boys get more attention, more teaching and instruction and also more disciplining than girls.

"Boys dominate the physical space of the classroom and the playground and, from our own experience, dominate the teacher's time too" .

                                                                    (Anti Sexist Working Party, 1985, 136)

Teacher presence is a powerful influence on the behaviour of boys and girls. Teacher location and attention patterns are important determinants of sex typing of classroom play (Marland, 1985, 33). In their research Sadker & Sadker (1985) showed that girls tend to be called on if they sit within close proximity to the teacher on the first row-right under his or her nose. Boys tend to be called on wherever they sit in the classroom.

According to Lobban, teachers believed that extreme differences between males and females exist as early as the age of three. They also appeared to believe that it is appropriate to behave differently to the sexes in accordance with their natural characteristics. They seem to interpret behaviour according to stereotypes, they expected their female pupils to be passive, dependent, compliant and on the way to marriage as their only career while the males are expected to be active, independent, bright and challenging and destined for a real career (Lobban, 1978, 57). Similar conclusions on the response of teachers to pupils of different sex have also been reached by Douglas (1967), by Jackson (1968), Levithin and Chananie (1972) and Ricks and Pyke (1973).

Studies have discussed the possible effects that differentiated patterns may have on students such as: lowered self-esteem for girls (Brophy & Good,1974), less participation of girls in high school maths and science classes and gifted programs (Sadker &Sadker,1985); differences between boys' and girls' achievement motivation patterns (Mednick et al., 1975) and less commitment to careers on the part of girls (Sadker & Sadker, 1985).

Teachers of both sexes know more about the boys. To most of them boys are individuals, they know their names and they learn them earlier, they can discuss their characteristics and idiosyncrasies (Spender, 1982, 67).

It is unclear why teachers behave in the way they do. It may be that pre-school and primary teachers start by perceiving their female and male pupils in terms of the stereotypes, and these perceptions go on to become a self-fulfilling prophecy. Boys become more autonomous whereas girls turn to being more compliant and less adventurous since they are being criticised for their failures. Teachers' preference for bright boys may have to do with the fact that they exhibit a degree of independence and confidence not shown by the bright girls whose socialisation at the primary level was for compliance (Lobban, 1978, 59).

"Such behaviour in teachers may be interactional, that is, they react differently towards male and female students because their own tendencies to do so are triggered or reinforced by features of the behaviour of the students themselves. Or the sex-differentiated behaviour of teachers may be structural, that is, set off by such structural factors as the sex ratio in the classroom, the stereotyped gender label of the school subject in question or of the school. These structural characteristics may also lead to differential behaviour along gender lines by influencing the achievement expectations by teachers of males and females".

(Safilios-Rothchild, 1986, 43)

One aspect of gender differentiation in education is probably derived from initial teacher training courses. In addition to teachers' attitudes towards and assumptions about people, including their beliefs about class, race and gender, which are likely to be reflected in their professional practices whether consciously or unconsciously, the initial teacher education they receive has implications for their future behaviour in classrooms and for their own development and careers.

The professional textbooks that teachers use are crucial to the way these future teachers are prepared to work with children. An analysis of twenty-four

most widely adopted teacher education textbooks showed that 23 of the texts give the issue of sex equity less than 1% of book space. Most of the texts guilty of this oversight are in maths and science - the areas where girls are most likely to have achievement difficulties. There were 32 male authors and 10 female authors (Sadker & Sadker, 1980).

Similar research has been done on other university textbooks. Betty Kirschner (1973) analysed ten introductory sociology textbooks. Fifty per cent did not index a reference to women; 20 per cent mentioned occupational wage differentials, but did not quantify the differential. A survey of 353 method instructors in mathematics, science, and technology nationwide revealed that while three-fourths of the respondents said they taught gender equity, they did so less than 2 hours per semester (Campbell & Sanders, 1997).

Similar findings have been shown in the analysis of psychological textbooooks (Birk et al., 1974) and introductory nursing textbooks (Allen,1986). Naturally in the last few years new subjects have been added to the University curriculum which increasingly sensitise the future educators in matters of equality between the two sexes. Gender equity should be taught more and the educators must not only understand but reverse the messages of inequality.

The basis of the agreement is that as teachers share with parents a common sexist culture, they too become agents of sexism. The school teachers having been themselves socialised into a sexist society enforce sex role stereotypes.

If boys and girls are not held to the same standards of classroom behaviour, unfortunate incidental learning may result. If one sex or the other gets more than its fair share of reprimands, antagonistic relationships between girls and boys may be established or reinforced. And most ironic of all, some students

misbehave in order to get attention. For them, public discipline is not a punishment but instead a type of reward, a way to gain attention from their teacher and status from their peers.

3.3.2.2. School Organisation

The organisation and management of schools may reinforce or counteract stereotypes. Relationships between the teaching and ancillary staff, in the subjects taught by male and female staff, school rules and internal school policies can demonstrate principles of equality.

Pupils in primary schools are frequently divided into single-sex groups for activities where gender is irrelevant. Female pupils may be lined up in separate rows from male pupils. Official record cards in schools may be colour-coded differently for boys and for girls. There may be separate listings of boys' and girls' names on the register, with boys' names first. Class lists, however, are often used as a source of organising a wide range of school activities. Arranging registers in this way encourages the school organisation to be divided on the basis of sex. There are other alternative methods such as listing children's names in alphabetical order or listing the children in order of age (ILEA, 1985, 16).

Research in Greek schools showed that teachers list children's names according to sex, use separate rows for girls and boys, have different listings of boys' and girls' names thus organising groups according to sex (Kantartzi, 1996).

Boys and girls in many primary schools have separate places to hang up their coats, and toilet facilities are frequently segregated. Girls and boys may even have separate lines in the playground, and outside classrooms. In some schools there are separate playgrounds: so that delicate girls can be protected from rough boys. Or, in mixed playgrounds, boys take over while girls stand in small groups around the edge.

In other schools restrictions exist regarding the appearance, mainly of boys, for example their hair should be short. The less they look like girls the better. There are separate gymnasia for boys and girls, where the activities are adapted to sex role stereotypes - dance and fitness for girls, sports for boys. In assemblies girls may sit while boys may stand, presumably training them for their future role as protectors of the weaker sex (Adams & Laurikietis, 1976, 38).

Primary schools cannot enforce regulations on uniforms, but dress codes too may be different. In some schools girls and even their teachers are not allowed to wear trousers, or shorts in the summer (Measor & Siker, 1992, 54).

Teachers frequently organize and manage their classrooms and lessons on the basis of gender. Teachers very often use the strategy of competition between boys and girls to motivate both to work harder. Teachers often organize races between boys and girls to see who can finish off their work first. Stressing differences and rivalries between males and females is one common teacher strategy to manage and discipline pupils.These practices are important because they remind pupils that they are either male or female. Such activities are significant in the process of fixing gender identity and have a long-term effect in limiting opportunity and life chances (Measor & Siker, 1992, 55).

The longer a student stays in full-time education the more marked the pattern of female subordination becomes and the more males she will encounter in positions of power and authority. Simply by observing the relative titles of each sex in the school, children learn the different societal expectations for men and women.The role models available to pupils are an important factor affecting the development of attitudes. If school cleaners are always women then it seems only natural to think of cleaning as a job for women.

Due to their association with caring for children, most primary school teachers are women, which further explains why primary schools encourage feminine qualities in their pupils. It is important to point out that until recently, (in Greece) it was forbidden for men to become kindergarten teachers.

Teaching is perpetually seen as a good job for a woman and a mediocre one for a man. For example, one study asked a sample of teachers whether they would encourage their own children to become teachers. While more than two-thirds of the sample said they would encourage a daughter to teach, over three-quarters would not encourage a son to do so (Delamont, 1980, 85).

In primary schools where women account for the majority of teachers very few become principals. In the staff hierarchy males are more often found in prestigious and powerful positions. The majority of headteachers are males despite the preponderance of female teachers. Fishel and Pottker (1978b) found in their study that as the grade level rises, and as the status of the administrative position rises, fewer and fewer women are found in leadership positions. Research in England (O'Connor, 1994) and in many European countries (Budge, 1995) shows the same results. Not only are women as qualified as men to be principals, but they are often more qualified than men to hold such positions. It seems sex and not ability is the most important determinant of whether a teacher becomes an administrator.

There is no apparent justification for the underrepresentation of women in the administrative positions of education. Many studies (Taylor, 1978; Fishel & Pottker, 1978b) have found that female administrators perform as well as or better than their male counterparts. The most significant results from these studies are categorised according to four areas: instructional supervision; relations with students; relations with parents; and community and general administration.

Schools with female principals have been shown to have fewer discipline problems, and higher student achievement . Women principals are more effective at resolving conflicts, they are more aware of potential problem students and they exhibit greater knowledge of teaching methods (Harvey, 1986, 511).

In fact fewer women teachers desire an administrative position, while almost all men want to become school administrators. Women experience the conflict between home and work. Women's roles in the family require them to spend much of their energy at home. Women, who want to have a career parallel with family, feel guilty about not giving enough attention to family obligations.

Women Managers in Further Education
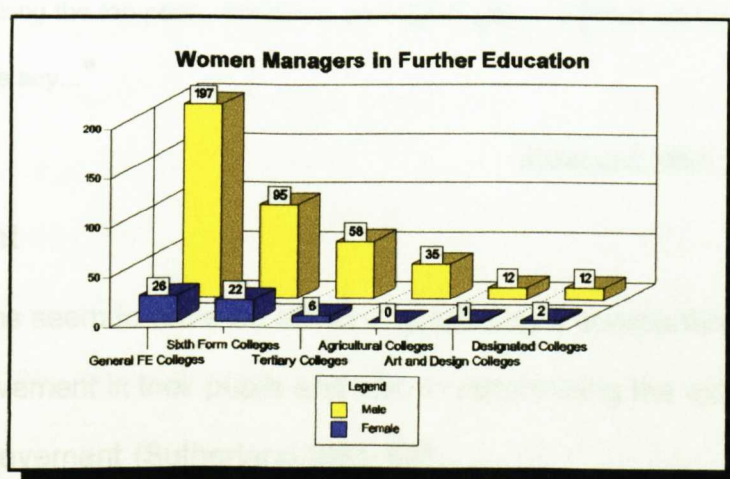
Figure 3. Source: Gee, 1995, 144

In 1977, in research conducted by Elizabeth Richardson, it was observed that women teachers were pursuing posts with little responsibility and few requirements, leaving the greatest responsibilities and direction to their male colleagues. The post of head-teacher created problems for a woman because the male and even other female members of staff had difficulty in accepting her authority and working under her direction. The overall conclusion is that even if women instructors practise the duties of a director in a certain school, they are still considered as persons whose comportment is defined by their sex (Richardson, 1977).

The implicit message that pupils may get from observation of the male-dominated staff hierarchy is that power and maleness are associated, while femaleness is associated with subservience. Such a hierarchy provides the female pupils with few powerful female role models (Lobban, 1978, 56).

Eileen Byrne (1978, 212) sees the resulting absence of women in leadership positions as disadvantageous to males and females.

"As long as children see men taking the top posts, decisions, and higher pay,... children will believe what they see and not what we say..."

(Delamont, 1980, 87)

3.3.2.3. Achievement

Educational systems seem to have an effect in producing a comparatively good or bad level of achievement in their pupils and also in determining the extent of sex differences in achievement (Sutherland,1981, 66).

Girls have less confidence in their ability to succeed in challenging intellectual tasks. This pattern emerges from pre-school and early school years despite the fact that girls consistently perform as well as, if not better than boys, during these years across a variety of achievement domains. The studies of children's achievement show that girls do better than boys academically throughout their primary education in all subjects, with the possible exception of mathematics (however, a report on the differences between GCSE results in year 11, showed wide differences between boys and girls with girls doing better) (Keele University, 1994). Girls like school better than boys. This could be due to the fact that at primary level they make faster progress, attain a higher level of achievement and therefore greater satisfaction than boys. Until recently research indicated that this situation changes when girls reach secondary school, and girls

begin to drop back. The ratio of female to male underachievers increases with age until the college years when the proportion of female underachievers exceeds the proportion of male underachievers. However, it is remarkable that in the past few years research has indicated that more and more girls have become even better than boys in all subjects including mathematics and science, subjects strongly considered to be masculine (GCSE Results Analysis, 1996; GCE Results Analysis, 1996; Wainwright, 1997; Carlton, 1997; Wragg, 1997). Boys seem to have fallen behind girls. As this is becoming an unacceptable situation many attempts have been made in order to explain the phenomenon and reverse the situation (Bleach, 1997; Wragg, 1997).

Girls more readily obey the teacher's authority, and are more inclined to conform to school norms. Girls want approval and so they perform well in school. They work for good grades. And indeed they obtain higher grades than boys (Hoffman, 1975, 135).

"Girls are conditioned to feel that pleasing the teacher and getting good grades are the important goals in schools and that learning per se is of a secondary order. In some cases at least, girls may get to the point that they study and try to do well in school in order to please the teacher rather than because they are interested in the subject matter or because they want to be promoted to the higher grade".

(Safilios-Rothschild, 1986, 39)

Although females achieve at relatively high levels in childhood, their ultimate levels of achievement are considerably lower than those of males. There has been intense concern about the high rates of academic and emotional problems that males experience during the primary school years with particular attention to the *"feminine"* nature of school during this period. There is a myth that

the culture of schools is female and that traditional female behaviour is rewarded while traditional male behaviour is punished (Shakeshaft, 1986, 500).There was

a good deal of popularization of the idea that boys suffer from the *"feminine"* atmosphere of schools. If boys were really feminised and oppressed in primary schools it did not appear like this in secondary schools. The reason may be that the demands secondary schools place

Source : Statham, 1986, 141

Science is for boys.

on pupils - to be adventurous in their thinking, prepared to try new subjects, to experiment, take risks, and operate more independently, fit in much better with the expected masculine behaviour in our culture. Boys and girls underachieved in specific areas of curriculum: as a general rule girls tended to do well at language-based skills and boys do better on the mathematical and scientific side of the curriculum. Boys seem to have more difficulty learning to read than girls, and girls have more problems with mathematics. There is a controversy here about the age at which girls' performance in mathematics begins to decline in comparison with boys (Measor, 1992, 53). However, the latest studies indicate that girls are starting to reduce the gap separating them from boys in mathematics. Analysis of the 1988 results at GCSE showed that in maths there was only a 2 per cent difference in performance (Hackett, 1993). Latest studies

as we have seen show that girls surpass boys even in subjects such as mathematics and science (GCSE Results Analysis, 1996; GCE Results Analysis, 1996) .

There are a number of conflicting explanations for this situation, which are linked to the varying theories of socialisation and different feminist theories. Those who accept biologically determinist explanations point to different inherent abilities as the cause of the imbalance: girls are naturally better at language-based tasks and boys naturally succeed when it comes to numbers which require skills in logic. Feminist thinking has emphasized motivational factors.

Several explanations have been advanced for sex differences in reading achievement, including hypotheses based on physical maturation, female teacher bias, teacher discrimination, feminization of reading, differential response to pupils' behaviours, and sex-relevant teaching styles (Bank, Biddle & Good, 1980, 119). The most common explanation is that reading is rejected for boys because of its passivity (Zimet, 1971). There is a greater frequency of cognitive statements directed to girls in reading than in mathematics and to boys in mathematics than in reading and this corresponds to the observed achievement patterns of boys and girls in these subjects (Leinhardt et al., 1979). Latest studies indicate that literacy problems begin in families where teaching a child to read is thought as a mother's work so boys do not have role models to follow (Carvel, 1997; Way, 1997).

Children come to school with a learning style and a sense of which activities are and which are not appropriate for them. The suggestion is that boys tend to view reading as an activity more appropriate for girls than for boys. Girls on the other hand see mathematics as something boys are more likely to find easy than they do. Children respond to the curriculum on the basis of gender, which affects their attitudes to different subject areas and their levels of

motivation and confidence (Measor & Siker, 1992, 61).

One factor may be the kinds of toy and activity that children choose and are given in their early years. We have already seen that boys are encouraged to play with activity and constructional toys (Arnot & Weiner, 1987; Delamont, 1980).

Opting for sex-typed subjects and avoiding those that are sex inappropriate can also be importantly explained by the cumulative impact of socialisation messages imparted by parents, media and teachers.

"This deficit of girls in mathematics and science education has serious implications for the career options available to women. Many potential sources for this deficit have been documented: mathematics anxiety, sex stereotyped wording of mathematical problems, and of science and mathematics textbooks , lack of parental encourangement, teacher influences, and negative attitudes towards mathematics and science related subjects. All of these factors appear to be directly related to sex-role socialization. A less direct influence is the failure of girls to develop the cognitive skills necessary for high levels of mathematics and science achievement".

(Marland, 1985, 25)

Among women there is a motive to avoid success, the so called "fear of success", when they are faced with achievement in traditionally masculine fields.This may be caused by expectations of negative consequencs, such as social rejection or feelings of being unfeminine.

Adolescent girls may discover that the demands of academic excellence conflict with the demands of "femininity". Young women may decide not to compete with their male peers but work to seek their approval instead. Women students decrease their achievements in the presence of male colleagues or boyfriends. The girls attribute their success to luck or an easy exam, whilst boys

have more confidence in their own ability and hard work (Mayes, 1986, 27).

Examination entry patterns and subject choices reflect the stereotypical attitudes that are still widely held. Research shows that sexism in the content of tests affects performance. Gloria Milton (1957) found that females did better at test problems dealing with matters considered appropriate to the female role than they did when the problems were about a steretypically "masculine" area. Other studies propose that girls tend to do better at questions dealing with human relations and that boys tend to do better at questions dealing with science and economics (Coffman, 1961).

The content of syllabuses and the way that a test is set can be sexually biased. The language in which syllabuses and examination tests are set tends to assume that examinees and the rest of the population are male, with constant references to *"he", "him"* and *"man"*. Sex bias can also be detected in topics and examples employed in a range of subjects. A study of science and mathematics syllabuses suggests that examples tend to be related to traditionally male interests and activities; application to areas of possible female interest is rare. Yet there is some evidence to suggest that when the human aspect of science is stressed and reference is made to its contribution to the lives of both sexes, girls perform significantly better. In some analyses it was found that in mathematics tests the same problems set in a different context could produce significant sex differences in performance. Although in mathematical terms the concept was identical, they found that there was a marked disparity when the problem was set in a male context: females found the problem much harder. Such investigations suggest that the performance of one sex or the other can vary according to the topics set, to the passages selected, and to the individual items within a test. In an analysis of standarized tests, which are used much more in the USA, the

frequency of male nouns and pronouns to female nouns and pronouns was found to be consistently greater (Kant, 1989, 139).

Title, McCarthy and Steckler (1978) found that the language usage of the most frequently used achievement tests included far more male than female references. Over 70 percent of the characters in the Callifornia Achievement test were male. When females were shown, it was usually in stereotypical roles.

An 1984 analysis of tests found twice as many references to men as to women. Even male animals were listed almost twice as often as female animals (Selkow, 1984). A later study found references to 42 men and only 3 women in the reading comprehensive passages used in the exams. Of the 42 men, 34 were famous, one of the 3 women was famous (Margaret Mead) and her work was criticised (AAUW, 1992, 52).

3.3.2.4. Counselling

Career education provides the structure within which secondary schools formally and explicitly prepare their pupils for academic life. Counsellors, both female and male may be biased against women entering *"masculine"* jobs. Counsellors' own bias toward the proper role of women in society seems to be a major criteria for how they advise students. The connections between school, the economy and the labour market are, of course, crucial aspects of education in a capitalist industrial society, and the mechanisms whereby schools filter their pupils into jobs or impact ideas about appropriate jobs, precisely because this is one way in which schools reproduce both the social relations of production and the sexual division of labour. Any career advice which girls received at school is likely to be limited in extent and frequently not taken seriously (Deem, 1978, 51).

Traditional counselling and guidance services play an important role in perpetuating sexist practices. Counsellors encouraged females to consider

occupations compatible with family living. Women counsellors as well as men counsellors had stereotyped notions as to the level and the types of occupations that are *"realistic and appropriate"* for girls. Bias existed even in the tests and measurements used for guidance (Lynch, 1975/6, 22).

Perhaps the most explicit example of how students were channelled along traditional lines is when they received guidance concerning their future careers. For some pupils counselling becomes a further voice reinforcing the familiar patterns of educational and work careers.

The ways in which vocational guidance channels students along traditional lines has been studied using recordings of interviews. One study examined the advice given to female students who expressed indecision about whether to enter engineering or education as their chosen field. Both male and female counsellors disapproved of the *"masculine"* field. They suggested that engineering is a man's field, takes longer than education to train for, requires working after 3 p.m., and is unpeopled (Pietrofesa & Scholssberg, 1978).

Bingham and House's study (1978) showed that secondary-school counsellors had negative attitudes about women's work-roles. In a study of working-class schoolgirls, Sharpe found that their career choices included jobs like office-work, teaching, nursing, shopwork, air hostessing, hairdressing and reception work. The jobs they chose obviously reflected the jobs that were normally open to them; these were usually extensions of their *"feminine"* role and exploited some supposedly *"feminine"* characteristics (Sharpe, 1976, 164).

If there is to be an effective change in future vocational roles for women, there must be an effort directed toward parents of preschool children and primary teachers as well as high school counsellors and teachers.

3.3.3. Epilogue

Socialisation is a continuous process and schooling is one of the most important stages.Though school is an agent for perpetuating traditional sex roles, it is also a force for innovation.

Sexism in school is in accordance with the sexism which pervades the culture and structure of our society and not a feature of the education system itself. Gender differentiation is produced and reproduced through the operation of patriarchal ideologies in places of work or production, in family life and in cultural forms and practices.

"Sexism in the curriculum cannot be eliminated easily because it is not a superficial overlay, a result of mere ignorance and oversight. Sexism is integral to our society, necessary to our system, and advantageous to men. It occurs at every level of experience within schools and serves a purpose".

(Spender & Sarah, 1980, 97)

Changes in education have a significant impact on society, since a reduction in the degree of sexism and sexual differentiation in education will also help to increase people's awareness of the possibility of achieving change elsewhere in society.

The reduction of sexism, sex stereotyping and curricular differentiation between boys and girls in schools would benefit both boys and girls , because it would decrease the extent to which the sexes are pushed into activities and areas of study on grounds other than personal aptitude or interest.

3.4.1. Children and Mass Media

Another important factor in children's socialisation is the mass media. Newspapers, television, radio and films transmit information about the nature and role of the sexes. Throughout the media, the sexes are presented in ways that are consistent with aspects of their stereotyped images. Furthermore, the media reflect and reinforce sex role stereotypes. The mass media not only entertain, but also inform and persuade. Much research emphasizes the role of mass media in the socialisation process.

For many preschool children, television is a surrogatte babysitter, a way for parents to keep children out of trouble. When parents provide little guidance, children get much of their socialisation from television. In one national survey (Clarke-Stewart & Friedman, 1987) in which children were asked to name a famous person they wanted to be like, most named entertainers and athletes whom they had seen on television. Few of them named politicians, artists, or scientists. Most of the children interviewed said that their television viewing was not limited in length or content.

If one excludes the children's interaction with their parents and school later on, it is almost certain that the greatest influence on the acquisition of sex role development is to be found in the various mass media. As we have seen, most theorists on sex role development, place emphasis on the learning of appropriatte sex- role behaviour by observation of male and female role models. Children can acquire behaviour patterns, attitudes, and emotional reactions by observing either live or symbolic models.

If the observation of models presented on TV does have a significant impact on children's learning of sex role stereotypes, then children who watch highly sex - role stereotyped programmes should acquire these stereotypes more

readily than children who watch programmes with limited stereotyping. Young children are unable to separate the real from the imaginary. Stereotyped characters appearing in mass media may be accepted as role models for the child (Stewart & Comiskey, 1977, 208).

Children are heavy users of many forms of media. Two-year-olds ask to have storybooks read to them and spend long periods quietly turning pages, studying pictures, and identifying objects by themselves. After six years of age, schoolbooks become a major concern, for better or worse, and occupy an important part of a child's time. Newspaper reading often begins with comic strips during the early school years and gradually extends to other types of content. Radio is a more important medium to teenagers and young adults (Butler & Paisley, 1980, 289).

Despite all these other forms of media, television has the greatest influence on and certainly more than on adults. The fact is that children of all ages spend a large part of their day watching television (Liebert, Neale & Davidson, 1973; Tuchman, Kaplan-Daniels & Benet, 1978; Murray, 1980; Skoubri, 1991).

While sex-role viewing preferences may reflect sex-role socialisation practices, it is likely that they influence the development of children's sex role attitudes later. Sprafkin and Liebert (1978), in an experimental study, where six-to eight-year-old children had the opportunity to choose between male character-focused and female character-focused programmes, found that boys preferred the former, and girls the latter. Parallel to these selections, boys and girls to the same degree (89.3%), identified with same-sex characters who were named as favourites.

Turning to what children like and what they watch even first-grade boys' favourites include more action programmes (featuring strong males) while first-

grade girls' favourites include many family situation comedies (Butler & Paisley, 1980, 289). On the other hand, although children's favourite programmes have something to do with what they actually watch, preference and viewing are not the same thing. Children watch even when none of their favourites are on, or they acquiesce in family preferences and watch what others want to watch.

In a piece of research in Greece (Doulkeri, 1991,96) it was found that children watch more specially designed children's programmes, Greek films and to a lesser extent foreign films and serials. Boys prefer cartoons with action where the main character is male and has strong manly characteristics (strength, initiative, supernatural abilities).

List, Collins and Westby (1983) examined the relationship between children's sex - role attitudes and memory for televised sex-role relevant and sex-role-irrelevant information. Third grade children were grouped as high-, medium-, or low-stereotype and viewed both a traditional and a non-traditional programme. Results indicated that for both programmes children demonstrated accurate memory for role-relevant information, but children higher in sex-role stereotype remembered less role-irrelevant information than low-stereotype children.

Atkin and Miller (1975) varied the apparent occupational role of the spokeswoman giving a testimonial in a commercial for eyeglasses that influenced viewers' perceptions of the appropriateness of that occupation for women. For example, children who saw the spokeswoman dressed as a court judge subsequently perceived this occupation as more appropriate for women than did children who saw her presented as a television technician and vice versa. Atkin and Miller also found that the sex of the children who appeared in a commercial for toy racing cars influenced young viewers' attitudes regarding the sex appropriateness of playing with this toy; viewers of the commercial in which girls

were seen playing with the cars were subsequently more likely to perceive this activity as appropriate for girls than were children who saw the same commercial, but with boy characters.

The notion that television affects children's sex-role attitudes is further strengthened by the impressive evidence of television's influence on the other areas of functioning. The effect of violent programmes on children's subsequent behaviour has been extensively researched and supported (Gerbner, 1972). On the positive side, it has been found that exposure to socially desirable content can increase child viewers' prosocial interpersonal behaviour and their willingness to help and cooperate (Stein and Friedrich, 1972). Furthermore, television has been shown to influence more subtle areas such as racial attitudes and cultural views (Greenberg, 1972; Donagher et al. 1976). These findings make it quite compelling to believe that the stereotyped sex-role portrayals on television affect child viewers.

3.4.2. Sex Role Stereotyping in Mass Media

The mass media reinforce and perpetuate traditional images of men and women. Males appear much more frequently in mass media than females. Butler and Paisley (1980) reviewed 13 studies of the relative frequencies of appearance of men and women in television programmes and report, 72% of the characters were male, 28% were female. Similar are the findings by Dominick (1979) who investigated the percentages of US television programmes shown during peak viewing hours that had only men or only women in starring roles. Over the whole 25-year period he investigated, Dominick found that females occupied starring roles for only about 30% of the time.

Investigations revealed that males were more often portrayed in employment than females. In a content analysis by DeFleur (1964) of occupational

portrayals in 250 half-hour time period broadcasts, the results showed that 83.9% of the televised workers were male while 16.1% were female. Males were portrayed in higher status jobs than they actually hold. More males were shown in higher status occupations than females (Seegar & Wheeler, 1973; Tedesco, 1974). The kinds of jobs in which women employed in the world of television tend to be limited to those occupations traditionally viewed as female, such as secretary and nurse. It is not surprising to find that great proportions of female characters were represented as housewives (Long & Simon, 1979; Butler & Paisley, 1980).

Occupational portrayal of women was rare and certainly not congruent with the actual number of females in the labour market. The male position of authority in the professional world is evident: women are seldom employed and, if they are, they remain in subservient, subordinate positions traditionally reserved for them (Tedesco, 1974; Franzwa, 1974). It has also been found that the marital status of women is revealed more often than that of men (Tedesco, 1974; Downing, 1974).

Cynthia Lont (1990) examined the roles assigned to females and males in non-music radio programmming. The analysis of the terms used to identify males and females throughout the non-music content indicated that females were referred to their family roles, (wife, mother, daughter, sister), women or as ladies while males were primarily referred to as guys, sir or Mr. This reinforces the cultural expectations that females should be known predominantly by their family orientation, or as passive observers (ladies) while males were known as one of the *"guys"*.

Female characters were usually younger than males (Downing, 1974). The majority of women shown on television appeared to be aged under 30, according

to a study conducted by Aronoff (1974). It seems reasonable to suppose that the emphasis on women in this age group is closely connected to the representation of many females in mass media as sex objects available for male domination (Lederer, 1980; Killoran, 1983; Durkin, 1985a; Matakin & Burger, 1987).

There is an emphasis upon female physical attractiveness and the use of beautiful young women to support images of powerful men in films and television (Butler & Paisley, 1980; Durkin, 1985b) and to add sexual decoration, often irrelevant to the product, in advertisements, magazines and newspapers. (Durkin, 1986, 203).

"The irrelevant use of women's bodies to sell products totally unrelated to them can be seen everywhere. Pretty half - naked girls appear on advertisements for bricks, aluminium, cars, garage doors, drink, cigars, tobacco and other products. These "attractive proportions" declare that "every factory should have one", and are a blatant example of the way that women are defined and "sold" in terms of their sexual attributes".   (Sharpe, 1976, 109)

Men, on the other hand, were often shown in positions of economic and social power. In a study, Manes and Melnyk (1974) analysed the marital status of females involved in television according to their level of occupational achievement. Compared with male job holders, female employees were depicted as less likely to be married, less likely to be successfully married, and more likely to be unsuccessfully married.

In general, males were represented as more dominant than females (Lemon, 1978) and women were commonly shown acting in deference to their husbands or as subordinates to men (Long & Simon, 1979). Generally, both sexes were shown as fairly intelligent on television, but males were shown as more so (Busby, 1975).

The portrayal of girls and boys in comics followed the same sex role stereotypes.

"Comics are important because all children read them. Furthermore, except for those comics meant to cater for the youngest age group, children choose to read them voluntarily, they read them eagerly and often in huge quantities over many of the most impressionable years of their lives".

(Wilkins, 1987, 5)

There are boys' comics and girls' comics. The majority of boys' stories are action adventures while girls' comics lack that action (Sharpe,1976, 98). Boyle and Wahlstrom (1974) analysed comics and found that 75% of the characters were male. 60% of the female characters were shown as victims. 80% of the male characters versus 5% of the female characters were shown in heroic roles.

In the cinema the roles that women play again followed a stereotyped pattern. While this medium is perhaps more specifically defined as one of fantasy, it has also a more intense impact on the viewers, who are in a social situation where they have to sit quietly and watch the film. The effect of the images portrayed such on television, will not teach people views on men and women, but will add to the direction already taken. Very few popular films showed characters, particularly female ones, who were honestly attempting to come to terms with the changing roles of the sexes and the way this affects their lives (Sharpe, 1976, 119).

3.4.3. Sex Role Stereotyping in Commercials

Commercials emphasized the subservience of women. Television commercials carry implicit sex role messages, as well as explicit messages aimed at selling the product. The impact of such implicit messages may be the most powerful precisely because the messages are indirect.

Content analysis of advertisements appearing in magazines was carried out by Courtney and Locheretz (1971). Parts of this study were replicated by Wagner and Banos (1973) and by Culley and Bennett (1974). The findings of these studies permited two generalisations. First about 22% of the women and about 49% of the men were shown employed. Second, men were shown in higher-status occupations. Across all the studies, about 3% of the women and 21% of the men were shown in executive positions.

Content analysis of the portrayal of women's roles in television commercials showed similar results. Women were predominantly portrayed in the traditional roles of housewife and mother (Courtney & Whipple, 1974). Culley and Bennetts' replicated study (1976) revealed that in TV commercials aired in 1974 as well as in 1971, the largest role for women was that of housewife and mother.

Perhaps the most striking of all the figures were those for the proportions of males and females who provide the " voiceovers" in advertisements. Voice-overs usually contain the authoritative recommendations of the commercials, and several studies have found that men were much more likely to be used for this task. Males, in fact, accounted from between 84% and 94% of voice-overs (Dominick & Rauch, 1972; Manstead & McCulloch, 1981).

Maracek et al. (1978) noted a subtle change in the portrayal of males versus females as authority figures in TV commercials from 1972 to 1974. While the representation of women both as authoritative voice-overs and as on-screen experts in advertisements without voice-overs remained virtually unchanged over the 3-year period, the proportion of female experts in commercials using an authoritative, mostly male voice-over had increased. However, this increase was restricted to commercials for "women's" products such as household and personal - care products.

Courtney and Whipple (1974) investigated the male and female role models that were provided between 1971 and 1973. They found that over 85% of the voice-overs in the studies of commercials were men. They found that women were seen in a much more limited variety of occupations that they actually participate in. In one of their studies, they found that 75% of the advertisements using women as models involved products found in the kitchen or the bathroom. Men on the other hand, tended to be shown as beneficiaries of women's work inside the house rather than making some contribution to household work. Male product representatives were usually portrayed as being more dominant, as advice givers, and as demonstrators. They were depicted in a much broader variety of occupations, while women, as we have seen, were usually depicted in some kind of home occupation or in the family.

3.4.4. Sex Role Stereotyping in Greek Mass Media

In research in the European Community (in which Greece has been a member state since June 1985) through the study of 1531 advertisements it was concluded that:

1.   Whereas women are usually those who show or use a product, the voice-overs are mainly those of men (72.3% is the lowest percentage in England and the highest 94.2% in Ireland). These manly voices advise, sum up the arguments or reach conclusions concerning the way in which a woman should act. In other words, men are those who direct women who consume.

2.   The faces that we see at work belong mostly to men, while the faces in family life belong to women.

3.   43.2% of the cases show women in the house and only 18% presents them working.

4.   In the majority(40%), women at home are presented as housewives and 17% as wives and mothers. Out of the house they are rather simple figures who present an object (30%) rather than working women (12%).

(Heliopoulou, 1987, 15)

In a Greek study by Clemes Navridis (1986) concerning the child as an advertising object, it was observed that in advertisements the man's voice dominates, while often the woman does not express her opinion even about the quality of the products that she uses daily.

The programmes on television from 1985 to 1990 (Doulkeri, 1991) were the subject of another study. The woman is mostly occupied in domestic duties, has children in adolescence while the man, because of his professional activities, has a social life. Marriage and family are considered important values for women and less important for men. Working women have an inferior position. They appear working in traditional feminine occupations without any authority, and under the commands of a superior man. The programmes for children portray a world divided in two by their reproduction of the old stereotypes. The leading role always belongs to boys, while girls are presented as weak and pathetic.

The press also promotes the traditional model of woman - wife - mother-housekeeper - sexual object and decorative element. This conclusion results from the reading of the news, comments, reportages, studies, analyses of interviews in combination with the pictures that accompany the passages.

Topics which concern the "*woman subject*" are very rare. The advertising messages emphasize the skill of housekeeping as the main concern of women. Women appear, to a great extent, in the advertisements which refer to food and cosmetics. Women are usually presented at home as mothers and housekeepers, while men are shown in their work-place, in advertisements which imply power or are related to financial affairs. Men or the manly voice-overs advise, offer arguments, lead and direct the women who consume (Doulkeri, 1992, 91)

In general, the mass media in Greece show women in the role of housewife and in inferior professions with limited authority. Statistically the

following roles are presented: 40% as nurses, 12% secretaries, 17% housekeepers, actresses and employees and 45% housewives. Women who are selected to present the programmes on television, also correspond to the sexist models of the charming, laughing doll (Doulia, 1987, 18)

The staff in the field of the mass media is constituted mostly by men. It is reported that in 1983, the staff of the 14 daily political newspapers in Greece, with the most sales, was constituted mostly by: 1) Men as chief - editors 2) Men political editors 95.52% to women only 4.47% 3) 95.83% men in the financial reportage and 4.16% women. Also in radio and television the distribution was 71% men to 29% women of whom most were in administrative posts and not in positions of political power (Doulia, 1987, 19).

3.4.5. Sex Role Stereotyping In Children's Programmes

Investigation into children's programmes showed the same results. There was a numerical imbalance between the sexes. Examination of children's TV in Britain revealed many programmes in which males were the main or sole stars. In fact, 70-85% of visible characters in children's television were male (Poulos et al. 1976; Nolan et al., 1977). Dohrmann (1975) found that in US educational programmes, males comprised 100% of the leading characters. Similarly, McArthur and Eisen (1976) compared the proportion of male to female figures in advertisements for children with those aimed for adults. The adult figures were 57% males to 43% females. In children' s advertisements the ratio was 80% to 20%.

Sternglanz and Serbin (1974) had to discard half of the most popular children's programmes showing on US television because they contained no females at all. They had several judges rate male and female role models in ten different children's programmes in twelve different behavioural categories. Of

those programmes that were studied, 67% of the characters were males and 33% were females. In addition the characters playing "bad-guy" roles were almost always males; females rarely had evil characteristics. The findings in another study by Streicher (1974) produced similar results.

When females were shown in occupational roles in children's TV, they occupied a very narrowly defined range in contrast to males. One study examined the form of children's commercials, analysing the pace, amount and action, visual and auditory techniques of advertisements directed at boys and girls respectively, as well as commercials intended for children of either sex. They found marked differences according to the sex of the intended market. Advertisements selling boys' toys showed the products involved in more activity than was found in either of the other types of advertisements. Commercials directed at girls had more *"fades"* and *"dissolves"*, and were accompanied by more soft background music. The sound effects in the boys' advertisements tended to be loud and dramatic (Durkin, 1986, 26).

In a study of the Christmas toy catalogues of nine major department stores there were 102 distinct categories of items illustrated exclusively with pictures of boys, compared to 73 showing only girls. In catalogue pictures illustrating the use of toys and games, the father is often seen in the role of "instructor" or "play companion", while the mother is placed in the role of "spectator", or, on two occasions, is shown "cleaning up" (Goodman, 1974, 124).

Of course we cannot claim that television and the other mass media are the primary source for sex role socialisation. Children are socialised mainly in the family.

"Children learn a great deal from interacting with the other key people in their immediate lives, especially family members, and that it is in this context that they make their earliest discoveries about social roles and opportunities. Television is integrated into these structures and processes.

Because TV is rife with traditional sex role stereotypes and implicit and explicit sexist messages, much of its fare will be to some degree consistent with the sex role arrangements of those households which are not consciously committed to alternatives to the status quo. Thus it seems very likely that although TV is difficult to identify as a primary cause of sex role divisions it will often serve to supplement, reinforce, and complement the social processes into which it is incorporated."

(Durkin, 1985a, 124)

However, it appears that traditional sex role stereotypes were present in most aspects of mass media; television, radio, films, newspapers, magazines and commercials. It follows that the greater the total amount of TV viewing by the children, the greater should be their acquisition of knowledge of those stereotypes. It is natural that children who watch a greater proportion of sex stereotyped programmes learn stereotypes most easily (Stewart & Comiskey, 1977, 210).

Undoubtedly, we cannot assume that simply changing the roles in children's entertainment media or TV commercials will resolve gender inequities throughout society. Not everybody is persuaded to respond to counter-stereotypes in identical ways. In fact, several studies have found evidence of resistance and individual differences. For example, Drabman et al. (1981) found that children presented with doctors and nurses in reverse sex roles sometimes failed even to recognize the switch, despite careful emphasis in the materials. Children were so convinced that doctors are male and nurses female that they missed the heavily emphasized reversal in the film.

Durkin and Hutchins (1984) found that young adolescents retained, and in some cases increased traditional sex-role beliefs with respect to careers after viewing non traditional careers programmes (advocating female plumbers, male secretaries, female doctors etc. Durkin (1985c) found that an authentic change

in broadcast television, namely the introduction of a woman to the all-male panel of weather forecasters on British national television, led to different evaluations by males and females. Men showed no difference in rating male and female weather forecasters; women evaluated the female more harshly. Clearly, the audience's pre-existing values and prejudices can influence the reception of a non - traditional message in a medium, leading either to stark opposition or to subtle scepticism. Other studies indicate that the sex-role orientation of the individual viewer influences how she or he processes non - traditional information in the media (List, Collins & Westby 1983; Eisenstock 1984) and that there are developmental differences in ability to interpret such information (Durkin 1985b).

Fewer studies have examined audience members' reactions to stereotypical messages. The demographic characteristics of the respondents in a survey conducted by Lundstrom and Seiglimpaglia (1977) provided evidence for the finding that better-educated and more affluent people tend to be more critical of sex-role portrayal in advertising.

In research done by Lull, Mulac and Rosen (1983) the results showed that significant differences were found between high and low feminists for television programme and radio format preferences.

In society we are exposed to a great deal of information from different sources. We cannot be sure that by erasing sex role stereotypes from the mass media, we will have a dynamic social medium for change. The results are more reliable when the mass media are also supported by other influences, such as teachers. Certainly that does not decrease the importance of mass media but it shows the complexity of the phenomenon. However, we are sure that the mass media are able to make public opinion more sensitive about sex role stereotypes.

CHAPTER 4

THE OCCUPATIONAL ROLE OF WOMEN

Unfortunately, the same sex role stereotypes exist in women's occupational role. Even in school textbooks, as we shall see later, women are presented as following the traditional sex role stereotypes as far as occupational roles are concerned.

The present status of women in the labour market and the current arrangement of sex-segregated jobs is the result of a long process. In most western countries after the Second World War, important changes took place in the work market. One of these changes was the invasion of women and the sudden increase of their participation in the workforce of these countries.

But the position of women in the workforce continues to be inferior in comparison with that of men. Women continue not to have the same opportunities and prospects as men. They continue to occupy the inferior posts on the professional ladder, posts of poor interest and temporary status. They continue to be gathered in certain *"feminine"* professions with wages and incomes much lower than those of men. Unemployment strikes more women than men. Women still participate in every kind of family enterprise as helpers and not as recompensed members (Papagaroufali, 1989, 92).

The development of feminism has promoted research and the formulation of theoretical frames for the interpretation of women's inferior position and of the existing discrimination. This discrimination begins before women's entry into the work market from the different opportunities available for women in education.

The theoretical approach to the discrimination is not unanimous but depends upon the trend that researchers follow. Theories of the division of labour are particular instances of more general theories which seek to explain the location of individuals in the positional structure.

The causes of occupational segregation may be divided into normative explanations which emphasise socio-cultural features of female roles (particularly in the domestic sphere) and second, economic explanations which see the quality of female labour as determined by the outcome of rational decision-taking by the individual and within the domestic unit (Crompton & Sanderson, 1990, 28).

Socio-cultural explanations of occupational segregation have much in common with sex role theories of gender inequality. They point to the fact that women's paid work closely parallels women's work in the household - cooking, cleaning, caring for small children and the sick, in short, nurturing and supporting. Occupations such as nursing and primary school teaching, and working in old people's homes and in the school meals service, are congruent with feminine stereotypes (Crompton & Sanderson, 1990, 28).

Neoclassical economic theories also view occupational segregation as a consequence of the quality of the different *"offerings"* of men and women to the labour market. Many modern - classic economy theorists (Becker, 1964; Mincer & Polachek, 1974) consider as a basic unit of examination the family or the household with the traditional distribution of roles to the sexes. The division of labour between men and women is seen as an outcome of rational decision-taking by individuals within the family unit. Occupational segregation is therefore an outcome of household specialisation in *"domestic"* or *"market"* paid work. (Crompton & Sanderson, 1990, 28).

Some Marxist accounts have suggested that male and female roles in the household, and in the formal economy, may be seen as functional for the capitalist mode of production overall (Crompton & Sanderson, 1990, 28). Hartmann (1983) has argued that the occupational structure is the outcome of the working of the two systems of capitalism and patriarchy (p.223) According to Hartmann the unrewarded and domestic housework are formed and defined by the two systems. In the first place, housework serves men who enjoy personal services and secondly, the capital economy because the work is done for nothing. The patriarchal relations between the sexes are expressed in the working areas too; men confine women to inferior working posts. So, the working class is divided in two parts, a fact that favours the exploitation of work by capital.

The theoretical approaches to the discrimination in the work market have basic differences and lead to opposing conclusions. The unequal status of women in the work market and in society cannot be explained solely by simplified interpretations but only by a complete confrontation and examination of the discrimination. The distribution of work according to sex in industrial societies was always very strict and it continues to be so. The specific form of the distribution varies in relation to the place and the time. The percentage of each sex's participation in the professional field, has changed

AND WHO WAS IT WHO WAS ALWAYS TELLING ME WHAT AN EASY LIFE I HAD HERE AT HOME ?

Source : Adams & Laurikietis, 1980, 112

repeatedly. It is rather interesting that at different times and in different societies the same work has been characterized as woman's or man's work. But the social and financial compensation is rather low when women are concerned and respectively higher in the case of men. It is not the nature of the work that defines the reward but the sex that does it (Kati, 1990, 29).

Different social dynamics shape the professional stereotypes in certain historical moments and the financial and cultural structure specifies the kinds of professions and their division between the two sexes. In a world where the power is produced and reproduced, those who have the power, generally men, will try to keep the "best" professions for themselves. The socially based distribution of roles between sexes, and the traditional belief about the roles lead women to make the decision to invest less in their education, to select definite professions and not to show undue concern about their professional development.

A young man starts thinking about work early on because he knows he will be responsible for earning an income for himself and his family, and because as an adult he will be esteemed by the work he produces (Epstein, 1973, 740).

Children learn about their sex roles at an early age. Through the process of socialisation they form standard opinions about professional roles. Later, school reinforces the stereotypes taught to children by their parents, giving them approval. We ought to emphasize the importance of the link between school, the economy and the work market as an

Source: Allen, Sandrers & Wallis, 1974, 140

educational factor and also to focus on the importance of the mechanism with which school filters students into acceptance of the appropriacy of the type of work according to their sex. These mechanisms are influenced by sexual discrimination, just because this is the way that schools reproduce the social relations and the work-distinction according to sex. School counsellors dissuade girls from selecting *"manly"* professions, as we have seen in a previous chapter (p. 72).

By making the role of wife and mother their first priority and aim in life, women regard work as something secondary and for that reason they accept part-time jobs or work with unfavourable terms since they can be combined with their family obligations. This group of women are found concentrated in lower grade and lower paid jobs which offer convenient working hours. Women with dependent children, as we see (Table 2) have the highest rates of part - time work or they are very likely to be no longer in the workforce (Hakim, 1995, 436).

Table 2: Patterns of employment and non - employment among women of working age, 1991

	full-time %	part- time %	not working %
All women	34	23	43
Women with no dependent children	45	19	36
Women with dependent children	21	30	49

Source: 1991 Census 2% individual Sample of Anonymised Records, Great Britain (Hakim, 1995, 435)

"By regarding marital and maternal roles as primary goals in life, working-class women are likely to treat work within social production as a peripheral and secondary concern. This focusing upon domestic life for personal fulfilment, which is encouraged rather than discouraged by the educational system, may partially explain why women are prepared to accept employment in the worst, lowest-paid jobs within the secondary labour market".   (MacDonald, 1980, 17)

In this way a vicious circle is formed where girls are socialised towards aiming for future marriage and maternity, they receive insufficient technical and professional training, they become wives and mothers and consequently they are obliged to accept low-paid jobs due to their domestic responsibilities (Vaiou-Stratigaki, 1989, 18).

A girl is urged to find happiness through marriage and maternity, so girls realize that they must choose between maternity and career, while boys can be husbands, fathers and working - men. Women learn that the most important duty is producing and raising child, whereas for men this does not affect them enough to prevent them from working.

Women are confronted with the dilemma: a career or family. The difference between nowadays and the past is that the conflict has become internal and continues as a psychological problem which fluctuates during a woman's life. The old idea that work and family cannot be combined still prevails. These feelings are shared by both girls and their families alike. Their families expect them to become brilliant scientists and equally good wives and mothers. Boys want their girls to be clever and educated but also to fulfill the motherly image. A husband in Greece prefers the traditional woman and demands that she should be a wonderful housekeeper and if she works, he feels diminished (Mousourou, 1986, 97). This happens because it is still believed that if a woman works, her husband is not capable of supporting his family.

The problem of work has a different dimension for a woman. Since a woman can get married, she can either work after her marriage so as to contribute financially or stop if her husband wants. Some women decide not to work and others to work until they have children. So they regard their work as a transitional period of their life and consequently show little interest in it, thus

providing arguments for those who talk about the disadvantages of working-women. In addition, they do not attempt to improve pay or working conditions, leading employers to the conservation and perpetuation of the different sex roles ideology (Lambropoulou & Georgulea, 1989, 59).

Research into a great number of professions supporting the supposition that women are not employed for all types of jobs concluded; women do not get involved on equal terms: they get the low-paid work, they are subject to psychological and sometimes physical violence or sexual harrassment at work and generally have an inferior position.

I really wanted to be a mechanic but there were no appenticeships for women
Source: Kirkup & Smith Keller, 1988, 210

Several pieces of research into professional selection of the girls have been done (Kasimati, 1989, 41). It was found that the professional and educational choices of girls were not only results of their personal decisions. Their choices reflect (apart from social influences: family, school, social class) also the general ideology regarding the kind of studies or professions appropriate for a girl (Haristou, 1989, 75). Girls are influenced by their environment and the standards that it offers. Of course, the same happens to boys but with girls they are gathered into one of the *"ghettos"* of working women such as teacher, nurse or typist (Chisholm & Holland, 1985).

The basic images of woman in modern society are still two-fold: woman as a sexual object and woman as a maidservant. As a consequence, jobs

appropriate for women are oriented to these two images. The image of woman as a sexual object emphasises her physical appearance and ignores elements such as: creativity, cleverness or ideas. On the contrary, men are evaluated according to what they do, think and believe. Furthermore the belief exists that beauty and cleverness are incompatible and this belief is reinforced by several fables (successful women are not attractive while beautiful women can succeed with their beauty and not their skills). The image of woman as maid results in showing woman as serving others (mother, housekeeper, volunteer nurse). This image creates false impressions in the work market, i.e. women work for low payments or even voluntarily.

The responsibility of domestic chores and of children's upbringing weighs on women's shoulders, makes her view her occupation outside the home as a secondary role and accept working terms inadmissible for the male workforce. These two images of woman, as sexual object and as maid hinder women's choices in the professional domain and in the acquisition of leading posts. Working women are nurses, teachers and factory workers yet they are seldom employed in "manly" professions. But even women who are occupied in these professions, become responsible for the traditional feminine interests. Women doctors are often involved in pediatrics, gynaecology, obstetrics.

The differentiation in the rewards between the two sexes is an existing reality in almost all countries. The inequality in incomes between the two sexes is possibly the most negative factor concerning women's entry into the work market. In Greece, equality of reward is defined by the constitution in article 22, but in reality things are different. In Greece, the differentiation of women's incomes from men's is marked, because it concerns the amount of the reward and also its evaluation (a woman's income increases at a slower rate slower than

that of a man's). The factors which play a positive role in the increase of a man's income (age, grade, specialization, years of service) intensify the differentiation between the treatment of the two sexes. The differentiation in rewards in favour of men is undoubtedly intensified by the distinction between jobs for men or women. Equally important is the differentiation in the perspectives of a career. That differentiation is proved by the low percentage of women who have positions with high incomes and prestige. Beside the fact that a woman's reward is inferior to a man's reward, women are less mobile than men. The pursuit of a more prestigious post and the seeking of higher revenues, in other words, the pursuit of professional success is not included in a woman's goals - not even among women who have especially high educational qualifications (Mousourou, 1986, 160).

In most countries eradicating differentiation in rewards and in perspectives for a career constitutes the essential aim of political intervention in the work market. It is accentuated that women are victims of prejudice that confine them to certain professions and to the lower levels of professional rank, but that men are also victims of reverse prejudices that exclude them from certain professions (kindergarten, librarian, stenographer, typist etc.). The battle is not at the level of the work market but mostly at the level of socialisation in education and in professional orientation.

A career is something which seems to exclusively concern men. Women who are seriously involved in their work are considered to be the epitomy of an 'unfeminine' woman. To call a man ambitious is a compliment while for a woman it can be considered as an insult. Career-women are facing disapproval not only from men but also from other women, and as a result they are discouraged.

"Women who select the domestic life often resent and deride those of their sex who choose careers...Domesticated women also feel the career woman is neglecting the duties of 'her proper station'".

(Epstein, 1973, 26)

Woman's financial independence changes the balance of power in the house from a patriarchal pattern to a more flexible system and so we pass to a family with double careers, where both partners have an occupation and participate in the housekeeping.

Women are part of the work force but all of them with the real and symbolic limitations of their roles as housewives. The work distribution according to sex expresses and reproduces relations of domination and subjection between men and women (Vaiou, 1989, 82). Work is a real weapon for woman and allows her to significantly improve her position in her marriage-partnership despite the fact that other factors can possibly intervene to reinforce or reduce the importance of this work. It was found that a woman's professional position is related to the locus of power in the couple, to the housework, to the conception of the roles of man and woman, to the real and desirable number of children, and to woman's satisfaction (Michel, 1985, 112).

Source : Alred, 1981, 17

everyone knows':
WOMEN CAN'T LIFT HEAVY WEIGHTS....

...MEN CAN
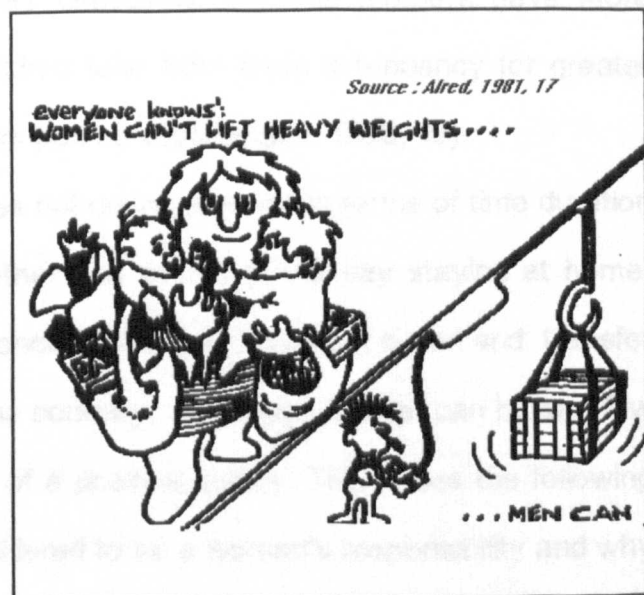
It is certain that the working mother who feels satisfaction in her work, behaves and deals with her children better than a non-working mother, because a mother's emotional state is an important factor. Working mothers get along better with their children who are cleverer and less nervous than those whose mothers are always present. They punish their children less, they follow their progress in studies better, and their children have better results in school (Venardou- Xenou, 1989, 167).

In France children who continue their studies after compulsory education are more likely to be from families where both parents work, than from families where only the father works. In England, the indicator of intelligence in children of working mothers was found to be higher than that of children of housewives (Michel, 1985, 112).

Statistics and research show that children of working mothers are more independent, they take more initiatives, they have more motivation, and they have greater readiness to react to life's difficulties. Working mothers have more experience, that is why their children take from them a tendency for greater socialisation and sensitivity (Maragopoulou-Giotopoulou, 1989, 19).

The mother's presence does not count so much in terms of time duration but as in terms of quality. A mother can spend all the day staying at home, showing indifference and lack of concern. She may even get bored and transfer this negativity to her children. On the contrary, a working mother can have a few hours contact with her child, but of a positive quality. This raises the following issue: why is raising a child considered to be a woman's responsibility and why does having a child affect only a woman's professional career and not a man's?.

"The catch-22 is that marriage and work are in greater conflict for women than for men: The accommodation of the job's demands to family needs rests on women. A married mother who works has two jobs; a married father who works has one."

(Tavris & Wade, 1984, 280)

Because both the sexual divisions of labour and male domination are so longstanding, it will be very difficult to eradicate them. Very basic changes at all levels of society and culture are required to liberate women.

CHAPTER 5

THE GREEK SITUATION

5.1. Girls' Education In Greece

In the past a student's sex played an important role in the process of education. Primary education was different for boys and girls. The idea that the female pupil in primary school was preparing herself for the role of wife and mother always had a strong influence on the school curriculum and the content of the textbooks. This belief formed the notion that in girls' primary schools the lessons should be taught more simply and be appropriate for their future role. Therefore, in the school curriculum of 1894, Geometry and Physics were removed, while Gymnastics was replaced by embroidery and sewing. Athough primary education had been compulsory since 1834, a very high percentage of women were illiterate (95% in the census of 1879).

Secondary education for girls took place in the "παρθεναγωγεία" (parthenagogia). Parthenagogia were schools exclusively for girls and they took their name from the word parthena which means virgin in Greek. For boys there were colleges. These were open to the public and prepared their students for university and professional life, whereas the schools for girls were private and their major purpose was to make girls good housekeepers, wives and mothers. The school curriculum reflected this purpose perfectly (Bakalaki & Elegmitou, 1987). The lessons in the parthenagogia were attended mostly by girls from upper middle classes and the curriculum included foreign languages (mainly

French), music (principally learning to play the piano), home economics as well as Ancient Greek. Lessons such as Physics and Chemistry were introduced after 1870. The hours allocated to Mathematics were reduced as the girls progressed to more advanced classes, a development which was related to the prevalent social beliefs of those days, that a girl's health would be threatened by the difficult mental work. By the end of the 19th century, a strong differentiation in the education of boys and girls still remained (Ziogou-Karastergiou, 1986, 485).

From the beginning of the 20th century the social conscience of women began to be aroused and education for females started to progress, initially in the big urban centres. In 1913, the educational reformation of E. Venizelos made girls' education equal to that of boys' and the first attempts at the coeducation of the two sexes began to appear. Finally, in 1929, coeducation was established but only in primary education. It took almost another 50 years in order for it to be applied to secondary education as well. The staffing of the schools followed the same discrimination. In girls' schools, female - professors were appointed and only if there were no female-professors available, would male professors be employed.

Discrimination according to sex was also blatantly obvious in the curriculum. For instance Algebra was not taught in girls' high-schools and girls received three hours tuition in Mathematics compared to four for boys.

New trends appeared mainly after the end of the second world war when the need for a more substantial education for girls became stronger. Society favoured the entry of women into the professional field thus proposals were made for the reformation of the school's role. By legislation passed in 1976, coeducation was established in all the schools of the country. Today in Greece single sex schools exist only in the private sector and usually belong to religious organisations of the catholic and the orthodox churches.

The definite establishment of coeducation came as a natural development, since Greek society was ready to accept this change. In the years that followed, several attempts were made to achieve equality in educational opportunities.

5.2. Teacher-Training

In 1834, a teacher training college was founded with the aim of training teachers (men and women). Very soon it became a males' college, while the training of women-teachers was left to private initiative, relieving the state from the responsibility of the education and the professional training of women teachers. Both teacher training programmes differed in duration and course content. A comparison of the two programmes reveals that the men's programme included courses in psychology, pedagogy and didactics, which were considered essential for a teacher's professional training. However, in the women's programme more importance was attached to singing, calligraphy and handicraft. The education and the professional instruction of a woman teacher were inferior to that of a man and that meant similar inferiority in girls' education in primary schools (Fournaraki, 1987, 403).

This discrimination continued until 1914, when colleges were colleges for the education of both sexes. Some of them were mixed and others only for women. Legislation of 1933 defined pedagogical academies as the only appropriate schools for the education of teachers. There was still a limitation on the number of women admitted (2/3 of the places being allocated to men). These limitations were abolished in 1976.

In 1922, postgraduate studies for teachers were established in the University of Athens, but again with a similar limitation of places for women. Examination of the statistics shows that the percentage of women who attended the postgraduate courses was lower than that defined by the legislative measures. For men it was easier to abandon their residence and move to Athens. Apart from this, there were additional social factors that hindered the attendance of postgraduate courses by women (such as family, children, husbands' profession) (Andreou, 1991, 20).

The restrictions, the exclusions and the differentiations in education and in the postgraduate studies of teachers were also expressed in the difference in their salaries. So up until 1920 the salary of a female teacher was 10 to 20 per cent lower than the salary of her male counterpart. The accessibility to women of higher administrative and supervising posts was limited essentially since postgraduate studies were regarded as an indispensable qualification. In 1906, the first woman was appointed headmistress in a girls' primary school. Until 1976 no woman teacher had been selected for the post of supervisor. In 1976 women inspectors were selected only for the posts dealing with kindergartens (there were no male kindergarten teachers), while in the preceding period the kindergartens were under the supervision of primary education supervisors. The access of women to the highest posts in teachers' unions appeared to be equally difficult, whereas in the highest collective organs of the Ministry of Education, no women had ever been selected (Andreou, 1991, 28).

5.3. Structure of the Hellenic Educational System

5.3.1. Pre-School Education

All the country's nursery schools are coeducational, and accept boys and girls between the ages of three and a half to five and a half. Nursery school education is optional and lasts two years. Nursery school teachers are almost all women, given that the training colleges accepted only women. With the implementation of the Law 1286/82 however, both men and women are accepted on equal terms in tertiary education, and under the law passed during the academic year 1983-4 the number of entrants to all forms of tertiary education and their various departments has been determined regardless of the sex of the candidates.

In the process of upgrading kindergarten education which began in the academic year 1984/5 the two-year training course was replaced by a four-year University-level degree course.

The Ministry of Education and Religion, in drawing up its plans for the period 1983-87 within the framework of the overall development plan, appointed a working committee in which the General Secretariat for the Equality of the Sexes was required to prepare the new curricula for preschool education and the handbooks and guides used by nursery school teachers with the aim of bringing children up with the principles of the equality of the sexes.

5.3.2. Primary Education

Primary education lasts six years for children between 5 1/2 and 12 years of age. The number of boys and girls registered is approximately equal and slight differences observed are due to demographic reasons.

Primary schools are co-educational and the curriculum is the same for children of both sexes. The number of women teachers in primary education is steadily decreasing. Registration of women students in Teacher Training Colleges decreased from 62.2% in 1973-4 to 54.4% in 1991-2. The numbers of women teachers in private education, however, remain high. This is partly due to a lower degree of mobility on the part of women, who are often unable to teach in remote regions of the country and prefer private schools which tend to be concentrated in urban areas.

5.3.3. Secondary Education

Secondary education in Greece consists of the following:

1. Junior Secondary Education, a three-year compulsory programme for children between the ages of 11 1/2 and 14 1/2. After graduation from Junior Secondary school those children who do not choose to enter the labour market can continue into Senior Secondary schools. In the academic year 1983-4 a total of 423,581 pupils were registered in Junior Secondary schools throughout the country. Of these 200,635 (47.3%) were girls. Although out-dated, these are the latest statistics available.

The content of studies and the curricula are common to boys and girls. Home Economics, taught to girls only until 1982, is now taught to both sexes.

The Junior Secondary school does not introduce any degree of specialisation but this follows in:

2. Senior Secondary school, a three-year programme if completed under normal conditions or a four-year course if taken at night school. There are three basic types of Senior Secondary school: General, Technical/Vocational and Integrated. There are also nine special Humanities High Schools throughout the country and Religious and Naval Academies. The Religious Academies admit boys only. All

graduates of Senior Secondary schools may compete for a place in university-level institutions. The senior-secondary level of education also includes a number of two-year technical/vocational schools.

Enrolment figures for 1982-83 were as follows: General Senior Secondary: total enrolment 244,057, girls 132,528 (54,3%). Technical Vocational Senior Secondary: total enrolment 76,492, girls 26,951 (35.2%). An analysis of the distribution of girls shows that they account for only 8.5% of the pupils in strictly technical schools but 61.3% of the enrolment in vocational schools training for traditionally "female" occupations such as the para-medical professions (General Secretariat of Equality, 1986).

The total number of graduates from technical and vocational schools in 1983 was 3,958, of whom only 282 (7.1%) were girls. The distribution of girls by occupation trained for was as follows:

Occupations	%
Mechanics	0.1
Electricians	0.4
Electronics	0.6
Building trades	13.8
Office staff, shop assistants	77.2
Silver and goldsmiths	7.1

(Source:General Secretariat of Equality, 1986)

Children decide upon graduation from Junior Secondary school which type of Senior Secondary school to enrol in. This decision has a major impact on the type of senior secondary education they will receive and the vocation they will be able to enter. In the General Senior Secondary school, the choice of orientation and special subjects is made in the third year, while in Technical/Vocational schools orientation is chosen in the second year and special subjects in the third. On completion of the first year of any Senior Secondary school students may

switch to another type of school and this means that in effect study and job options are made when the student is 16.

Most girls enrol in General Secondary schools. This, however, is also true of the majority of pupils of both sexes continuing from Junior Secondary into Senior Secondary. Only one quarter of Junior Secondary graduates choose to continue in Technical/Vocational schools.

Table 3: Senior Secondary Education by Sex (1983-4)

	FEMALE %	Male %
	55.0	45.0
TECHNICAL	8.5	91.5
Sector:		
Mechanical	2.5	97.5
GENERAL	5.0	95.0
Electronics	3.0	97.0
Building	36.6	62.3
Chemical & Metallurgical	25.0	75.0
Applied Arts	58.0	42.0
Textiles-Clothing		100
VOCATIONAL	61.3	38.7
Finance/Administration	61.0	39.0
Agriculture	53.6	46.4
Social Services	71.7	28.3

Source: Unpublished Ministry of Education Data

A series of general statutory measures have been introduced to promote the equality of the sexes in secondary education. The school population of secondary education and of certain primary schools was segregated by sex until 1977, at which point coeducation was generally introduced. Today coeducation is compulsory throughout the educational system.

Girls in secondary and primary education were obliged to wear uniforms until 1982, although boys were always free to dress as they pleased. This anachronism was abolished by a circular of the Ministry of Education in 1982.

Table 4: Secondary Education: Enrolment Trends by Sex

| | 1971 | | 1975 | | 1978 | | 1982 | |
	F100	M100	F100	M100	F100	M100	F100	M100
General Secondary	93.2	72.2	94.0	70.6	91.6	75.1	82.5	68.6
Technical/Vocational	6.8	27.8	6.0	29.4	8.4	24.9	17.5	31.4

General Secondary
School counsellors:

Percentage of women:	48/421= 11%
In primary education:	25/238=10.5%
In secondary education:	23/183=12.5%
Percentage of women head teachers:	2.891/6,948=42%
In primary education:	1.909/4,691=41%
In secondary education:	982/2,257=43.5%

Source: General Secretariat of Equality, 1986

5.3.4.Tertiary Education

The tertiary institutitions of Greece are as follows: Universities (where courses last 4-6 years), and Institutes of Technical Education. The right to enrolment in these institutitions is acquired through competition in nationwide examinations held in June each year. This method does not permit any discrimination because of sex. In 1983 girls accounted for 52% of those successful in these examinations. Women tend to enter university courses in Humanities and Law (50%). The number of women in Polytechnics continues to be low, although the total number of women students there has tripled since 1973-4. In departments of physics, mathematics, medicine and engineering the proportion of women amounted to 21.8% in the academic year 1982-3. Again, these statistics are dated but more recent ones do not exist.

The number of women entering technical and vocational tertiary education is steadily increasing, but without much diversification as to field of study. Out of every 100 women on such courses, 37 are on business courses, 28 on health and social welfare and 22 on technology-based courses.

By the Law 1286/82 schools of Domestic Science were opened to men. In Greece the bias of university education continues to be in the direction of the arts and humanities, partly for traditional reasons and partly for structural ones, given that the educational system as a whole has always been weighted towards such fields and away from more practical and technical subjects.

New legislation on tertiary education has opened the Schools of the Ministry of Public Order, the Police School and the Fire Brigade School to both men and women. The Nurses and Medical Visitors' Schools, which accepted only women, have been merged with the Institutes of Technical Education as part of the departments of Health Visitors and Welfare Schools and are open to both men and women alike.

Table 5: Trends in Tertiary Education by Sex

	1971-2	1975-6	1978-9	1981-2
Total students	85,000	117,246	126,244	122,874
Women	27,574	43,361	49,537	51,056
% Women	32.4	36.9	39.2	41.6

Source: Unpublished Data from Ministry Education

Table 6: Distribution of Teaching Staff by Sex and Subject

SUBJECT TAUGHT	MEN	WOMEN
Religion	1,911	814
Greek Lang. & Lit.	4,451	11,963
Mathematics	5,044	1,565
Physics	4,276	2,091
French	75	1,351
English	254	2,283
Art	106	208
Economics	236	176
Physical Education	2,106	1,323
Engineering	299	32
Law/PoiticalSciences	72	73
Medicine	132	55
Domestic Economy	-	832
Music	175	843
Technology	280	163
Short-course vocational	212	186
Secondary Vocational	211	2
TOTAL	21,281	23,507

Source: Unpublished data from Ministry of Education

5.4. The Greek Educational System: Aim, Method and Content

The Greek educational system has always been highly centralized and tightly connected to political changes. The last great educational reform was, made by the socialist government with the publication of new schoolbooks in 1981 and the corresponding teachers' books with directions and methodology.

In Greece curriculum, teaching methods, content and textbooks are totally controlled by the Ministry of Education. The Ministry of Education conducts a competition for new school textbooks and selects the best. The books are then sent to schools where they are distributed free of charge. Thus, all children in the same grade throughout the country use the same books. As the books come to the children directly from the central authority without any intermediate influence, one can presume that they will reflect the official ideology which each ruling party wishes to *pass down* to the next generation. Not unexpectedly, primary school textbooks in Greece were the subject of a considerable ideological battle during the last century. This battle, centred around the opposite views of "conservative" and "progressive" intellectual politicians and educationalists, has not ceased influencing Greek even today. The general view is that the textbooks in use in 1975 in Greek primary schools presented numerous problems. They were old (the first edition was published in 1953-4), out of date as regards content and teaching methodology and unrealistic in the messages they transmitted. Yet while they had become the subject of broad criticism by scientists and teachers, the problem of how the two genders were presented appeared to cause little concern, until the end of the 1970s.

One of the first moves made by the new socialist government (1981) in their education policy, was the gradual replacement of all schoolbooks. The

Ministry of Education formed committees, which included very few women, to undertake the task, on a collective basis, of preparing the new books (Deligianni-Kouimtzi, 1992, 67).

Parallel with the publishing of the new schoolbooks was the publishing of teachers' books that have detailed directions for the new teaching approach, the level of learning, the material to be taught and the teaching aims and techniques. The aim of this analytic programme is based on three aspects:

1.   Gradual familiarity of the pupil with moral, religious, national, social, economic, political, aesthetic values.

2.   Gradual introduction to the sphere of knowledge.

3.   Gradual socialisation of the pupil.

(OEDB, 1987, 5)

The aims of teaching are achieved by self - determination, critical thought, communication and cooperation. Standardization, the sterile learning by heart, and many details are avoided, but in reality, it appears that in Greek school classes there prevails the teacher - centred method that leaves no option for pupils for self - discovery. Many pieces of research show that the greater part of the teaching time is taken up by the monologue of the teacher and the rest by a directed dialogue (Matsaggouras, 1985, 1987). Children are forced into imitation and a mechanical learning by heart, while critical thought and love for reading and books are put aside (Bobotsiaris, 1986; Giotopoulos, 1987).

The new books are surely more progressive and modern in comparison to the content of the old ones. Nevertheless, the new books have received severe criticism both for their content and their structure and methodology (Fragos, 1983; Vougioukas, 1983; Tsakalidis, 1983; Noutsos, 1983; Mavrogiorgos, 1985).

5.5. The Status of Women In Greece

Nowadays the status of women in Greek society has improved significantly in comparison with the past. Many efforts towards achieving equality and the legislative consolidation of the woman's position have been made in the last years. A new reality for women, new roles and new standards of attitudes are forming. Undoubtedly, women in contemporary Greek society are passing through a transitional phase and are facing problems of adjustment, particularly the oldest ones. A lot of women have not become aware of the new roles which they are called to play and therefore they do not help men to acknowledge them either. The changes that society has suggested through legislative arrangements often seem to some women unrealistic and utopian.

The paradox of Greek society is that the imposed legislative arrangements were too progessive for the traditional structure of a society that was still not ready to accept them. This is one of the rare occasions when legislation seems to lead and society is forced to follow.

The structure of authority in society and in the family can be changed only if men and women will accept a new conception of the idea of the exertion of power and its distribution between the two sexes. The fact that today many women question their traditional role and can - because of their active participation in production - lay a claim on equivalence, does not mean that every woman follows them or that every man agrees with them.

Although the 1975 Constitution stated that men and women were equal, the old patriarchal values continued to survive since certain laws were still being implemented which regarded the man as the head of the family, the one responsible for making the decisions and arbiter of the children's destiny, whereas

women were still obliged to take their husband's surname. However, in 1983, Family Law was modernized. The husband was no longer the head of the family; the family was founded on equality, and the joint responsibility of both sexes for the upbringing of the children (goniki merimna) was stressed. Women do not have to adopr their husbands surname and children can take either the father's surname or the mother's surname, or both. Until 1983, children born within marriage automatically took the surname of their father. Today persons entering upon marriage are obliged before the ceremony to state the surname their children will bear, by joint and irrevocable declaration. If they omit to make this declaration, the children will bear the surname of the father. Children born outside marriage take the mother's surname as a matter of normal practice.

Under the law previously in force, the husband was the head of the family and it was him who decided on all matters relating to the family. The wife's duties were confined to the care of the household. In order to ensure that she made a contribution to the family economy, her parents were obliged by law, in accordance not only with their own financial situation but also with that of the bridegroom, to provide their daughter with movable or immovable property or cash or some other form of dowry. Under the new law the couple decides jointly on all matters relating to the marriage and each contributes to meeting the needs of the family in accordance with his/her capacity. In cases of separation and after divorce both spouses are under the obligation to pay maintenance. Irrespective of who was at fault for the divorce, either of the former spouses can seek maintenance from the other but only in the event that he/she is unable to support him/herself on his/her income and property.

By the Law 1288/82 the Council for Equality of the Sexes was founded. Today the General Secretariat for the Equality of the Sexes of the Ministry to the

Prime Minister is a State agency with responsibility for dealing with any issues rising related to the equality of the sexes.

However, the ideological mechanisms of the state continue to transfer the traditional standard conceptions about the roles, the professions and the relations of men and women. Even today the access of Greek women to leading posts and to positions of decision and power, is almost nonexistent. However, a woman is allowed to assume positions of responsibility in the fields of culture and intellectual development. In these fields the percentage of women participating is high: 7% in intellectual fields compared with only 3% in scientific fields. In the cultural domain the percentage of women involved rises significantly to 25% (Kaltsogia-Turnaviti, 1991, 13).

The participation of women in central and local government could not be said to be satisfactory, as can be seen from the tables:

Table 7: Members of the Greek Parliament by Sex

1981 elections		1985 elections	
Men	Women	Men	Women
287	13 (4.3%)	291	9 (3.3%)

Participation of Women in the Council of Ministers after the 1985 Elections:
Total Ministers and Deputy Ministers: 48

Women Ministers and Deputy Ministers: 4

Participation of Women in Local Government after the 1982 Elections:
Total mayors:	276
Women mayors:	4
Total village presidents:	5,761
Women village presidents:	22

Source: Unpublished National Report Submitted by Hellas, 1986

Women do not exercise their right to work on the same terms as those available to men as a result of the different roles for the two sexes in the structure of social organisation. The conditions in the labour market in relation to the participation of women make this apparent.

Table 8: Workforce and Percentage Distribution by Sex

Year	Total	%	Women	%	Men	%
1985	3,892,457	100	1,374,501	35.4	2,512,956	64.6

Source: National Statistical Service Workforce Survey 1985 (unpublished)

In 1985, 63.1% of working women were married and 36.9% unmarried, divorced or widowed. 79.7% of female university graduates were members of the workforce, as were 45.1% of secondary school graduates, 35% of primary school graduates and 17.5% of women who had never attended school at all. Two thirds of the female workforce is concentrated in the service sector, where women are generally in low-grade jobs and occupations informally accepted women's jobs - cleaners, nurses, telephonists, sales assistants, secretaries and so on - where they rarely rise over medium status.

Although the principle of equal pay for equal work has been established by law, women's average earnings are lower than the average for men. In 1975, the average wage of a female shop assistant was 72.9% of that of a male employee, and in 1985 it was 73.1%. As the economic crisis deepened the impact on women's earnings was a negative one. In the public sector, the remuneration of women and men is equal when they are in the same sector and grade and when they have the same number of years of service. As a whole, however, women working in the public sector receive lower wages than their male colleagues as they tend to remain in the same low grades.

The belief that still prevails nowadays in Greek society, is that woman's work is inferior and complementary. Although her working is considered as a necessary complement to a family's budget, the husband in Greece demands that she should be first and foremost a good housekeeper and mother. Therefore many women stop their work after getting married (Mousourou, 1985, 96).

The world of the household is considered by men in Greece as an exclusively feminine concern and their participation in the household is something inconceivable (Nikolaidou, 1975; Gizelis, 1984). In that way woman enters production but she does not get out of the house (Kaklamanaki, 1994, 93).

Of course, besides the social prejudices that regard woman's work as shameful - especially when the husband has a financial efficiency - objective difficulties also prevent working mothers from continuing their work. The deficiency in numbers of state kindergartens and the school's timetable (in Greece schools work in two shifts, one in the morning 8.30-13.00 and the other in the afternoon 14.00-19.00) make the combination of work and maternity even more difficult (Kataki, 1984; Sinopoulos, 1986; Symeonidou, 1989).

Though some progressive steps have already been taken, there is still a long way to go. The declarations of equality will remain inactive, if they are not accompanied by a change in attitude. It is necessary for the state and the society to make a harmonized attempt so that with the combination of legislative measures, the improvement in social services and the correct enlightenment of the public and educational changes, discrimination against women within the family, at school and in society at large, will disappear.

CHAPTER 6

THE INFLUENCE OF BOOKS ON CHILDREN

As we have seen, schools, parents, the media, all help teach children society's definition of appropriate behaviour for women and men. As we have seen in chapter 1 one of the factors in socialisation is books. Nevertheless, I consider it more appropriate to examine the books separately before starting the review of different studies and the description of my research. Books, too, are agents of socialisation and serve to broaden and reinforce the child's experience. They reflect cultural norms and present role models with which children identify. In addition, the content of textbooks has the stamp of official approval so children assimilate content and values at the same time as they learn to read.

Children's books play an important part in the process of sex role socialisation, as they influence children's views of themselves as male or female. Through books children learn what is characterized as right for their sex, and therefore what they are expected to do (Bourke, 1985, 5).

"Throughout the history of children's books authors have told their stories not only to entertain but to articulate the prevailing cultural values and social standards. Children's books are especially useful indicators of societal norms. And, children's books have, for a very long time, defined society's prevailing standards of masculine and feminine role development. Literature for young children - picture books, folk-tales, fables, fantasy, poetry and realism - is close to the heart of the young and growing child. The language and illustrations of all children's books, good, bad or indifferent, shape their lives. Picture books offer young children a macrocosmic resource through which they can discover worlds beyond their own life-space. The young child's sense of personal and gender significance is changed, influenced and connected to the world community through books written for them by adults".
(Peterson & Lach, 1990, 189)

Children then learn sex role identification and sex role expectations from the books they read. Sexist children's books reinforce a view of society in which the options for females and males are more limited by gender stereotyping than they are in real life. This stereotyped presentation of sex roles in children's books is reinforced by similarly limited options in other media. We must also not forget that the written word is one of the most powerful ways to transmit ideas and information. The written word seems to represent reality and even adults capable of critical thinking tend to believe that something written must be true. The great importance of school textbooks results from their frequent use. The teacher and students use them every day for several hours. Students repeat them constantly. They copy extracts, they learn by heart, they summarize, they discuss the meaning. In that way they frequently repeat the precepts, the ideas and the values presented in these passages. So, their ideological importance is intensified by the fact that although school textbooks are supposedly used for the transmission of *"neutral"* knowledge, they indirectly promote their own ideology which becomes more effective. Their ideas are easily assimilated since they are transmitted by an indirect method thus neutralizing the ability of critical resistance (Fragoudaki, 1979, 13).

They are presented to children within a context of authority in the classroom and finally every child must read them. They are presented to children at a time when most of them have not yet attained a critical perspective on themselves and their backgrounds (Women on Words, 1977, 41).

"The textbooks can be regarded as a special case of adult-produced discourse about children. They are unique materials in that they are books written by adults, for children, ostensibly about children, for use in contexts of child-adult interaction, and in a context which is significant in children's educational careers - learning to read." (Baker & Freebody, 1987, 55)

We ought not to overlook what the readers possess themselves and in what way they interpret what they read. The children give their own content and their own explanations to what they read because reading is a constructive process. What readers bring to the text influences how they take meaning from it. Different readers, with different backgrounds, may take very different meanings from the same text.

Richardson (1986) marks another factor that affects to what extent a book's content influences its readers. According to Richardson a schoolbook has two defining features: it is written for pupils or students, and it is read in schools.

"To state that schoolbooks are read in schools is to obscure or forget the fundamental fact that there are schools and schools: there are different contexts in which books may be used, and it is often the contexts of books, not the contents of books, which determine the messages which are communicated. This point can be emphasized with a well-known optical illusion:

A

B
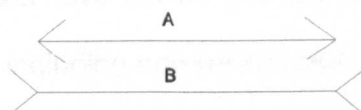
The two horizontal lines A and B are precisely the same length. But because they appear in different contexts they seem quite different from each other - that is, one appears longer. Similarly, a schoolbook in one context (a particular school, a particular classroom, a particular teacher) may be excellent, but in a different context may be pernicious. The message actually received by pupils and teachers from a book, as distinct from the message intended by the author, depends on the ethos and relationships in which the book is used".   (Richardson, 1986, 33)

The research concerning the influence of sexist and non-sexist books and their contribution to the conservation or the broadening of sex role stereotypes

is limited in comparison to the research which refers to the presentation of the sexes in books for children. The disproportion between those two categories of research is defined by Tibbets (1978/9). As she contends, it seems that the difficulty in isolating the influences that children are subjectet to from other media of socialisation makes the conducting of such research rather difficult.

Crawford and Chaffin (1986) emphasize the importance of gender schemas in reading comprehension. Just as children's understanding of the fairytale *Snow White* is influenced by their schemas for other concepts, it is also influenced by their understanding of femaleness and maleness. The child's schema for gender affects the interpretation; for example if they have accepted the stereotype that it is a female's job to do domestic chores, they are unlikely to question why *Snow White* so willingly agrees to become the housemaid for seven strange men. On the other hand, the child who has not incorporated that stereotype into his or her gender schema might well ask "Why didn't they just clear up after themselves?"

A number of studies have shown that gender schemas influence a variety of cognitive processes, including comprehension, recall of material, bunching of learned concepts, and implications and inferences drawn from the material (Martin & Halverson, 1983). Gender stereotypes affect readers' perceptions of others' behaviour, their memory for that behaviour and the inferences they draw from it (Bem, 1981; Berndt & Heller, 1986).

Stereotypical information about both sexes is retained more effectively than reversed stereotypical information. Koblinsky, Cruse and Sugawara (1978) gave fifth grade children a series of stories, each with a major boy and girl character who exhibited both stereotypical and reverse-stereotypical activities and traits. Subjects remembered more of the stereotypical than nonstereotypical activities and traits. The children were particularly unlikely to remember the

feminine traits of the male character.

Liben and Signorella (1980) presented first and second-grade children with a series of pictures depicting adults performing sex stereotype consistent and inconsistent activities. During recognition children made more errors on the nontraditional pictures compared with the traditional portrayals of the male stimulus person. Liben and Signorella's research suggests that children's memories are affected by their own gender attitudes and by the differential evaluation of men and women engaged in nontraditional activities.

In similar research by Kropp and Halverson (1983) involving preschool children, four stories with boys or girls as the main character, each performing typically masculine or feminine activities were read to each child. Both boys and girls most preferred and recalled the stories that were stereotyped with regard to both sexes of the main characters and sex appropriateness of activity.

Story materials were presented to primary school and preschool children, varying the sex of the characters in the stories. Primary school children differentially approved of behaviour which was sex-role congruent and rated role-congruent behaviour as more effective (Connor, Serbin & Ender, 1978). They also preferred to read about characters of their own sex, and were more likely to want to 'try out' activities modelled by characters of their own sex (Connor & Serbin, 1978). Preschoolers paid less visual attention when teachers read stories involving males in helpless and fearful roles than when the stories were presented with female characters. They also recalled more sex-congruent than incongruent behaviour by the story characters. These results are consistent with these of Koblinsky, Cruse and Sugawara (1978) who found greater recall of sex role appropriate behaviour in primary school children. Extremely incongruent behaviour, however such as a male ballerina may attract more attention than sex

role congruent presentation (Jennings, 1975). Styer (1975) studied the reaction of kindergarten children to the nontraditional portrayal of boy characters in two stories. In one story, the boy showed fear; and in the other, he wanted a doll. The majority of children of both sexes objected to the behaviour of both characters. Styer's study is particularly interesting because it reveals the persistence of children's stereotyped definitions of sex roles, even when realistic characters portray alternative roles. The findings indicate that children are aware of and sensitive to sex stereotypes in stories, and that their attention patterns and learning are related to the congruence of such material with sex role norms.

In addition to positively affecting attitudes, non sexist materials also affect children's story preferences and their recall of story material. Jennings (1975) had preschool children read stories describing male and female characters engaged in what were at that time traditional and non traditional role behaviours. Children showed strong preferences for stories in which characters conformed to gender-stereotyped roles. However, both girls and boys remembered more of the details of the same-sex, non traditional story, and remembered the story for a longer period of time than the same sex stereotyped story (Peterson & Lach, 1990, 194).

McArthur and Eisen (1976) studied the impact of sexist and non-sexist stories on preschool children. The children were divided into three groups. One group heard a story depicting achievement-related behaviour by a male character, another heard a similar story about a female, and the third group heard a story depicting no achievement-related behaviour. The children persisted longer in a task after hearing the story depicting same-sex achievement behaviour than after hearing about an opposite-sex character. In addition, the more the children remembered about the story of achievement by a same sex character, the longer they persisted in the task. Finally, after hearing the story about female

achievement related behaviour, children were more apt to view a girl in another story in a different situation as being achievement-related.

There seems to be some indication that the amount of time children spend on materials influences the extent to which they retain the attitudes and values of those materials. A study examining the effects of a sexist reading programme in which the 20 consonants were represented by boys and the six vowels by girls found this to be the case. The longer a group of children were exposed to this programme, the more their attitudes became sex stereotyped and the longer those attitudes were retained. Children who used the materials regularly had more stereotyped attitudes and the longer those attitudes were retained. Children who used the materials regularly had more stereotyped attitudes than those who used it intermittently and were, in turn, more sexist than children who had not used the series at all (Nilsen, 1977).

Crawford and Chaffin (1986) note that such schemas are not fixed, but are "internalized social constructs" which are subject to change, based on experience. Barclay (1974) found that children who were taught with non sexist stories or books over sustained periods of time showed reduced sex role stereotyping. For example, children in kindergartens who heard stories about mothers who worked outside the home increased the number and types of jobs they thought were appropriate for women to hold. Similar to this is the research by Scott and Feldman-Summers (1979). Scott and Feldman-Summers examined the effects of portraying a female main character in a traditionally male role on male and female children's sex role perceptions and story evaluations. Children read a series of stories in which either the majority of main characters were female, or the majority of main characters were male, or male and female main characters were equally represented. The results of the study indicate that a) exposure to female main

characters in nontraditional role activities increased children's perceptions of the number of girls who could engage in the same activities but did not affect perceptions of sex role activities not presented in the stories, and, b) story evaluations did not vary according to the sex of the main character.

Fischer and Torney (1976) wanted to investigate the effect of stories on the demonstration of dependent or non-dependent behaviour in children in the preschool age-group. According to the sex role stereotypes, women are regarded as being dependent persons while men are regarded as independent. This kind of behaviour is attributed to the characters - models of male and female given in the passages in books for children. They read to two groups of 5- year-old boys and two groups of girls, stories that differed only in the child's sex. This character demonstrated dependence on or independence from an adult. It was found the reading of the story with the independent character influenced the behaviour of the boys more than that of the girls.

McArthur and Eisen (1976) wanted to examine the effect of the stories that present characters who try and persist, in order to achieve a goal and finally they succeed. The researchers tried to examine the effect of this specific behaviour, because it has been stated that persistence, making an attempt and finally achieving success are qualities attributed to boys. The results showed that both boys and girls tried harder and more persistently after they had heard the story.

Ashton (1983) examined the hypothesis that children exposed to a stereotypical picture book would demonstrate stereotypical behaviour, while children exposed to a nonstereotypical book would demonstrate nonstereotypical behaviour. Ashton examined the influence of the books on the readiness of children to get involved and play with toys that are traditionally considered

appropriate for children of the opposite sex. She reached the conclusion that stories which present characters who agree to play with toys for the opposite sex, significantly reduced the tendency of both girls and boys to avoid playing with those toys. The reduction in tendency was greater in girls, a fact that suggests that boys reject everything typically attributed to their sex with more difficulty than girls.

These studies clearly show that sustained use of non sexist materials produces significant changes in children's thinking. They develop more egalitarian attitudes about what females and males can do, and they show decreased sex role stereotyping in general. Children as young as five are positively affected by the use of egalitarian books and filmstrips (Flerx, Fidler & Rogers, 1976) and the use of nonsexist literature caused a measurable positive change in attitude in children as young as four (Berg-Cross & Berg-Cross, 1978).

However, the extent to which positive school materials can counteract negative influences outside the school - as well as negative peer influences within the school - remains unclear. In her book "*Print and Prejudice*", Zimet concludes that while it would appear that much of the long-term influence of reading depends upon its reinforcement in the home and community, the potential for changing a point of view has been demonstrated by the immediate effect books do have on children's beliefs (Zimet, 1976).

Obviously books alone do not create attitudes. Children arrive at school already having attitudes and opinions that they have been adopted or adapted from parents, friends, television, and other sources. As we have seen, both children and adults tend to interpret what they read so that it will conform to their previously internalized attitudes and behaviour. This does not mean that non-sexist books are ineffective; rather it suggests that books alone may not make the

difference. Books are only one component, although an important one. For example, one six-week project focused on children in kindergarten, and those in the fifth and ninth grade. Teachers used non-sexist books and other materials to encourage these students to develop non-sexist attitudes and behaviour. Evaluation of this non-sexist curriculum project revealed that many of the girls showed an improvement in their self-esteem and acceptance of the wide range of options available to them as adults. However, one of the most significant findings of this study was that teacher enthusiasm was a key factor in affecting attitudinal change of both boys and girls at all levels (Guttentag & Bray, 1976).

These findings suggest that non-sexist books alone may not be enough to influence a change in attitudes. However, teachers who positively and enthusiastically use non-sexist materials may still play a very important role in reducing children's conceptions of sex role stereotypes.

CHAPTER 7

REVIEW OF THE LITERATURE ON

RESEARCH INTO TEXTBOOKS

Textbook research regarding sex role stereotypes originates from America when the late 60s and early 70s saw the development of the women's movement. A different concept of a woman's role developed and intense activity aiming at social changes took place. As a direct consequence, education was influenced.

As we can see in Table 9 (p. 159) a great deal of research was carried out in the 70's on textbooks for primary and secondary schools as well as on children's books, concerning sex role stereotypes. The severe criticism of the sexist content of textbooks led many publishers to print directions about how to write non-sexist books. Although many people believed that this change was impossible, many writers and book editors became sensitive towards this problem. So, they gave directions for the printing of non-sexist books and the use of non-sexist language (Scott, Foresman & Company, 1972; McGraw-Hill, 1972; Holt, Rinehart and Winston, 1975; Harper and Row, 1976; The National Union of Journalists, 1982).

Similar pieces of research were continuing in other countries both in Europe (the United Kingdom, France, Germany, Switzerland, Austria) and in the entire world (Asia, Africa, Australia). Unfortunately, the results led to similar conclusions about the existence of sex role stereotypes in the content of textbooks.

Nevertheless, the result was to sensitize writers, illustrators, designers, editors and authorities. Indeed, the repetition of similar pieces of research on textbooks that were published later showed a remarkable improvement.

In this chapter I intend to deal with research on primary and secondary schoolbooks, children's books and literature. The analysis that concerns books for different school subjects (textbooks for history, mathematics, science) is presented further on where an analysis of the relevant Greek books is also presented.

The research on schoolbooks started basically in America twenty years ago. The research was done mainly on reading books and children's picture books. Because of the mass of research, this chapter is divided up according to the country of origin. The studies originate from almost all over the world thus indicating the increased interest in themes concerning sex equality.

7.1. Research In the USA

As we have mentioned before, the first studies with this topic begun in America. One of the first is that by Child, Potter and Levine (1946) who analysed 914 stories containing 3,409 themes from 30 major third-grade reading textbooks and found that 72 % of all themes within single-sex groups involved boys and men. Each sex was associated with certain themes more often than their general numbers would predict. Boys/men were often associated with achievement, activity and organisation. Girls/women were often associated with nurturing, affiliation, elation, order, embarrassment avoidance, blame avoidance and rejection.

Buford Stefflre (1969) examined 60 primary school reading textbooks from six American publishers; he found that 19% female and 87% of the male characters were employed in the textbooks. Comparing the percentage of women in the stories with census data, Stefflre found that the percentage of married working women was very low (39% in stories and 17% in census data), including teachers (33% in stories and 7% in census data). Too few working women were in clerical and sales jobs (13% in stories and 38% in census data), and too few as processors and machine operators (3% in stories and 22% in census data).

Marjorie U'Ren (1971) reviewed 30 primary school textbooks for use in California. Boys/men accounted for 75% of the main characters, 80% for the story space, and 85% for the illustrations. In general, boys were achievers and girls were helpers; many boys received public acclaim for their achievements, but only two girls did.

"The textbook writers are apparently uncomfortable with the idea of a female succeeding in her own right. If she does make use of a talent, it must be for the benefit of others, under the direction of others; any contribution she makes to her field of knowledge should preferably be made quietly, without fanfare or public recognition".   (ibid, 222)

A study done in 1971 by the Feminists on Children's Media concentrated on the Newbery Medal winners and books recommended by the American Library Association. Of the 49 Newbery Medal winners evaluated, books about boys outnumbered books about girls three to one. The books contained derogatory comments about girls and character portrayals of girls involving stereotypical behaviour. The study was replicated in 1985 by Kinman and Henderson (1985). In comparison to the 1971 study, the number of books with girls or women as the

main characters had increased. Eighteen books presented positive images of females, while only six presented negative images.

Aileen Nilsen (1971) analysed 58 picture books. These books were Caldecott winners, from 1950 to 1970. From 1951 to 1955 the percentage of girls pictured in books was 46; from 1956 to 1960 it dropped to 41%; and from 1961 to 1970 only 26% were girls. Eighty-four % of the books portraying women showed them wearing aprons. Pictures of women not wearing aprons included a nun, a queen, an Indian squaw and a mother on an outing with her children.

Rosalind Engel (1980/1) and Dougherty and Engel (1987) replicated the research done by Nilsen (1971) with similar results. However, in the latest research there were changes towards sex equality in the numbers of characters used.

Suzanne Czaplinski (1972) analysed Caldecott and Lewis Carroll Award books chosen between 1941 and 1972. She found that male characters accounted for 100% of all characters from 1900 to 1929, 83% from 1930 to 1939, 29% from 1940 to 1949, 42% from 1950 to 1959, 80% from 1960 to 1969, and 100% from 1970 to 1972. In illustrations she found 4,232 male characters and 1,783 females. In texts there were 4,646 males and 1,203 females.

Weitzman et al. (1972) carried out some studies of picture books that had won the Caldecott medal. The winners showed 261 pictures of males to 23 of females, a ratio of 11:1 that increased to 95:1 when they included animals with obvious identities. They also analysed names in titles in children's literature and found that more male characters than females appeared in titles.

The research was replicated by Kolbe and LaVoie (1981) and Collins at al. (1984). The analysis showed that while the ratio of female pictures and characters had improved considerably since 1972, role portrayal and

characterization had not changed.

Dianne Graebner (1972) analysed 554 stories in primary school readers published between 1961 and 1963 and between 1969 and 1971 to determine changes over time. In these stories, published by two major companies, boys/men comprised 71% of the main characters in the early period and 75% in the later period.

Marten and Matlin (1976) replicatied the 1972 study by Graebner with similar results. Similar results were also indicated in the studies by Oliver(1973/4), Britton (1973), Saario, Jacklin and Tittle (1973), Hillman (1974), Britton (1975) and Grund-Slepack and Berlowitz (1977).

One of the most significant studies is the research by Weitzman and Rizzo (1974) who analysed the textbooks used in the average classrooms in the United States in grades one to six in five subject areas. The major focus of the analysis was the textbook illustrations, as they provided a single uniform indicator with which to compare the different series. Each person in each illustration was categorized along 50 different dimensions including age, sex, race, expression, activity and occupation. Females accounted for only 31% of the total of the textbooks while males accounted for 69%. Of the total of over 8,000 pictures analysed, more than 5,500 were male. The percentage of females varied by grade level. They were 32% in the second grade but declined to only 20% by the sixth grade.

Frasher and Walker (1975) examined first and second grade reading textbooks from four major Basal reading series. A total of 734 stories were read and analysed. Adult males were observed in occupations outside the home. The list of occupations in which males were observed was long and varied, containing fifty-eight different occupations. The list for women was short and limited,

containing only eleven different occupations, all of which were traditional female jobs, such as teacher, nurse, librarian and stewardess. One hundred and sixty-five stories showed mothers doing housework, cooking, buying groceries, clothing or household items. Fathers assumed the role of family leadership entirely.

"Time and time again, mothers were represented as dull, ineffectual, almost totally preoccupied with housework and shopping, incapable of solving problems, and even stupid. In story after story, when father reads, Mother knits. When Mother does read, it is usually a magazine. She is seldom seen without her apron and almost never seen in slacks or shorts. Once in a while, she drives the car, but not if Father is around..."   (ibid, 234)

Stewig and Knipfel (1975/6) analysed one hundred books representative of those available to children in libraries, published between 1972 and 1974, to determine how realistically books dealt with women's roles. This study was a replication from an earlier study made in 1972. The study made in 1973 (Stewig & Higgs, 1973), showed that the 154 books examined featured unrealistic presentation of women's roles. In this sample of one hundred picture books, women were pictured in subordinate roles in the home more often than in active roles in the community. In fact, in nine of the one hundred books surveyed, no women were included at all, though men were.

The studies by The Resource Center for Educators (1976), Pauline Gough (1976), Aleen Nilsen (1977), Britton and Lumpkin (1977), The Committee on Women's Rights (Dayton Schools) (1978), Rupley, Garcia and Longnion (1981) and Hodgeon (1985) also produced similar results.

One study was conducted by the research group known as Women on Words and Images (1977). They analysed 134 primary school reading textbooks published by 14 publishers between 1964 and 1971 and found that, on average,

men were shown in 24 occupations while women were shown in five. However, they counted 147 different occupations for men and only 26 for women, the most sex typed or unrealistic (eg queen or witch) occupations.

Janice Pottker (1978) examined twenty primary school readers and found that fifty-seven % of the women in textbooks were housewives. Primary school teachers hold 42.22% of the salaried occupations in the texts. Textbook-women were excluded from many different jobs, whereas men assumed a wide variety of roles and activities. Women were shown in sixteen salaried jobs whereas men were shown in over ninety jobs. Many texts had stories devoted to famous people, but most of these famous people were men.

St. Peter (1979) investigated sex role portrayals in non-sexist picture books as compared to more conventional picture books (including Caldecott award winners). She found greater representation of females in the titles, main characters and illustrations of the non-sexist books, as well as a preponderance of female characters performing instrumental versus expressive roles.

In a similar content analysis by Albert Davis (1984) of 50 non-sexist and 46 conventional preschool picture books, the findings revealed secondary independent females and nurturing and non-aggressive males in non-sexist books. On the other hand, females in non-sexist books were more nurturing, emotional, and less physically active than males in either nonsexist or conventional books.

Even recent studies have produced similar results (Williams et al., 1987; Gonzalez-Suarez, 1989; Purcell & Stewart, 1990; Peterson & Lach, 1990; Ann Trusdale, 1992; Martinez and Nash, 1993; Agee, 1993).

Research done on high school books also had similar results. Susan Wiik (1973) found that American high school literature anthologies were written primarily by men (84%). Wiik analysed 450 textbook literature selections which

involved 376 male authors and 94 female authors.

Jennifer MacLeod and Sandra Siverman (1973) analysed the major senior high school US Government textbook distributed by each of eight major publishers. They found:

1.   Ninety-nine % of the quotations were by men.

2.   Ninety-seven % of those mentioned in the index were men.

3.   Thirty-one of the cartoons showed unfavourable stereotypes of women while only 6 % showed unfavourable stereotypes of men.

4.   One % of the pictorial chapter headings showed only women, 61% showed only men, and 33% showed both sexes.

5.   Six % of all illustrations showed only women, 63% showed only men, and 31% showed both sexes.

The research done in literature provides similar findings. On examining the images of women in literature Ferguson (1981) writes:

"The problem with images of women in literature is that they are largely male representations...Of writers who have been recognized as significant even in our time, only one out of twelve has been a woman. It is not surprising, then, that female characters have been most often presented as stereotypes, serving as foils, motivators, barriers, rewards, and comforters to males who actively pursue adventure and their own identities. From a male perspective, the central and most desirable characteristic of female characters has been their passivity".   (ibid, 6)

The traditional stereotypes of women in literature are the images of the mother, the wife, the woman on a pedestal, the young girl, the sex-object, the woman alone and the lady.

Enid Blyton, author of many books for children, has also been exposed to severe criticism. Her central heroes are boys and they are those who decide

(Cadogan & Craig, 1979). Disney's comics have also been criticised about their ideological messages concerning the two sexes. Disney's world is a world of uncles and grand-uncles, nephews and cousins. The male-female relationship is that of eternal fiances (Dorfman & Mattelart, 1979).

Lukenbill (1974) investigated male roles in modern society as portrayed in novels set in twentieth century America. He studied 22 titles. Sixty-five father characters were identified; 56 were sufficiently developed in the story to be analysed. In 68% of the fictional families, fathers filled the traditional role of head of households, while 71% were the sole breadwinners for the family. Only 35 home-centred work tasks were performed by fathers, supporting the stereotype that only women perform housework.

Gershuny (1975) analysed the sex roles portrayed in illustrative sentences in one of the modern unabridged dictionaries on the market, and found feminine gender stereotyped in 75% of illustrative sentences sampled. Masculine gender appeared three times as often as female gender in the sentences illustrating the usage of the defined words, while masculine words outnumbered feminine words by a ratio of 2 to 1.

Lous Heshusius-Gilsdorf and Dale Gilsdorf (1975) analysed career orientation textbooks. Books portrayed specific jobs that typically reinforced traditional occupational images.

"Males are told to be bright, independent, strong, and productive in order to hold the more difficult, the higher level, and the leading positions. Females, with few exceptions, are told that their futures are relatively unimportant, nonproductive, and service-oriented and require an attractive appearance, which is often viewed as incompatible with intelligence".   (ibid, 211)

Stern (1976) examined the content and photographs of twenty-five foreign language textbooks published from 1970 to 1974 in America. The texts were used by students enrolled in primary and secondary foreign language courses from primary school until college. On examination, sexism was perpetuated by both men and women authors.

"Whether by a female or male author, revised or a first edition, or considered nonsexist by the publisher, these texts, especially the college ones, overwhelmingly omit women or place them in mundane and eccentric roles".   (ibid, 294)

The American Heritage School Dictionary computer analysis of five million words in children's schoolbooks revealed four male pronouns to every female pronoun, and even in home economics books the pronoun 'he' dominated 'she' by nearly two to one (Graham, 1978).

Similarly, audiovisual courses for the teaching of French reinforce ideas of sex roles. Possibly to ensure a feeling of familiarity, the family situation is often portrayed in primary school children's textbooks: father drives the car and goes out to work while mother dutifully engages in cooking and other domestic duties (Sutherland, 1981, 130).

Lorimer and Long-Simon (1979/80) examined the content of several well-used Canadian primary school reading series. They found:

1.   Of the person-characters, 77% were male, 23% female.

2.   Of the personifications, 84% were male, 16% female.

3.   Of the main person-characters, 81% were male, 19% were female.

The content of the male-female portrayal in both series they examined seemed quite restrictive. Males were almost always big, strong and wonderful

while females were admiring and well-meaning. 145 males were portrayed in 100 different jobs. Thirty-one females were portrayed in 24 different jobs. Males were depicted playing out 328 personality traits while females evidenced only 174. In short, the portrayal of males was far more complete, and therefore far more attractive, than the portrayal of females.

7.2. Research in Great Britain and Australia

In a study of Ladybird reading schemes (Northern Women's Groups Education Study Group, 1971) the findings showed that there is a different world for males and females.

"When we looked at the 'Ladybird' series (and both text and pictures are important here, since an artist will often, perhaps unconsciously, supply a relevant detail which is missing from the text) we noticed three main ways in which this reinforcing of sexual roles is achieved. First, we noticed the entirely different roles of the parents and the ways in which the children were shown to be imitating them. Secondly, the children themselves lead very different lives: the boy's and girl's toys, clothes and hobbies are sharply differentiated. Thirdly, we noticed the overwhelming degree to which the male characters, boy and father, take the initiative".   (ibid, 147)

In an analysis done by Donlan (1972) in popular fairy tales such as *Mother Goose, Sleeping Beauty,* and *Snow White,* Donlan found all of the females portrayed in the tales to be passive. According to Donlan, picture books and other children's literature traditionally have three recurring female types: the sweet little old lady, the beautiful young heroine and the independent woman. In traditional fairy stories the problem is particularly acute.

"Princesses wait passively, even asleep in extreme cases, to be rescued by handsome princes on obligatory white horses. The girls involved do not have to do anything for themselves, like study science or get a degree or slog in a factory to make a living; their beauty and their goodness ensure they will be saved".   (Measor & Siker, 1992, 57)

Similar findings showed the research done by Lieberman (1986) in fairy tales. He found that physical characteristics of men were not important, but that women were always beautiful if sought after and ugly if wicked. Lieberman believed that stories stressed beauty as a girl's most valuable asset, marriage as a reward, and passiveness, submissiveness and helplessness as desirable female characteristics.

Nightingale (1974) examined sex roles in children's literature. She proposes that the worst thing in role preparation are books exclusively for boys or girls. Both stress the polarity of the sexes and exaggerate the sexual stereotypes. Books especially for girls are set in predominantly female societies like schools, pony clubs, ballet school, and among secretaries, nurses or air hostesses. Books for boys extend the child's desire for adventure and involve him closely with the technical aspects of the development of the plot.

"It will be argued that many of the books I criticise merely represent society as it is. This is true. But I am writing from a point of view which is critical of the way society is, particularly in its attitude to women. While it is representative and safe to write books showing women in traditional passive roles, books of this sort show no encouragement to girls who have not yet totally accepted second class citizenship. One of the many reasons that girls accept their passive, secondary sex role is because they are not exposed to the idea that they can be anything else".   (ibid, 151)

Glenys Lobban (1975) took six reading schemes in common use in infant and primary schools in Britain. In all these series the *"feminine"* represented

behaviour was domestic, passive, expressive and centred indoors. Lobban coded the adult roles presented, the new skills learned, the leadership roles assumed in mixed activities, the activities shown, the toys and pets owned by the children. She found that the 179 stories contained seventy-one heroes and thirty-five heroines (most of the heroines starred in traditional female roles such as learning how to care for a new baby). Girls had a limited number of toys and associated activities whereas boys had cars, trains, aeroplanes, boats and footballs. Boys too were more often shown as taking the lead when both sexes were engaged in the same activity. The one skill which seemed to be the province of girls alone was that of looking after younger brothers and sisters. Adult roles presented three possibilities for girls - mother, aunt and grandmother.

"It is illuminating to contrast the female and male worlds the schemes showed. The female world was almost entirely oriented around domestic activity and childcare. The message that the schemes conveyed was that a woman's place is in the home and that little girls should spend their time learning 'feminine' skills such as cooking and childcare".   (ibid, 205)

A study of 36 books used as primary school texts in Scottish primary schools found that boys were depicted less often than girls in situations showing passive behaviour - 98 as compared to 151 situations. Boys were also more often shown in situations outside the home. They engaged in initiating activities more often than girls and had a greater variety of toys. In adult activities men were shown in 50 occupations, only seven of which were shown as also engaged in by women; women stayed in the house and were occupied with domestic duties, though, remarkably, men played more with children (McDonald & Thomson, 1975).

Adams and Laurikietis (1976) analysed sex roles in reading schemes. They found that the female roles were mother, aunt and grandmother in contrast to

males who appeared in many roles. For boys there were a lot of interesting things to do, while girls played with dolls and prepared the tea. As Adams and Laurikietis indicate, it is interesting to note a list of words given to children so to prompt them to write sentences about their parents:

Mummy: Pretty, apron, works, cooks, cares, hug, loves, always

Daddy: plays, shows, watch, ease, paper, pipe, drives, paddles (ibid, 44)

Rauch (1976) examined the textbooks of English as a Foreign Language. She divided the textbooks into three periods: the early textbooks (immediately post-war), the textbooks of the sixties and the contemporary textbooks. The quantitative survey indicated a decrease of sexism only in including females as central characters in the texts. Nevertheless, even in new textbooks only one in eight stories deals on average with a female character and one in four stories contain women as central figures. Even less realistic was the representation of female professions with less than one in five professions. Females played a central part in textbook stories less often than males.

Sex Education Books have been criticised also. Joan Scherer Brewer (1979) examined most of the books on the standard recommended book lists of sex education materials. Sexist stereotypes are implicit in most of the characters who appeared in books.

"Disservice is done to girls at every socioeconomic level by conveying the impression that a female's essential worth resides in her ability to become a mother. In most of these sex education books, women are portrayed only as wives and mothers realising their reproductive potential. Women are not shown as humans first who possess, among other attributes, the ability to conceive and reproduce life. As in other children's literature, doctors are all men; nurses, women". (ibid, 136)

Goodall (1981) examined books for children from four to eight years old. The results showed a differentiated appearance of girls and boys. "Favourite activities ascribed differently to boys and girls, at the crudest level Johny plays with cars and makes things while Jill plays with dolls and plays make-believe."(p.50) From the adult figures, the mother is the most central character both in terms of the frequency with which she appears across a wide range of material, and in terms of the attention given to her in each case. Fathers' role has features that, in general, are distinct. Whilst he is usually shown to be loving, gentle and caring, he appears with considerably less frequency than mother.

Edgerton and Brown (1983) carried out a brief study of literary textbooks in secondary schools. In English Literature the standard "O" Level poetry textbook in all schools was "A Choice of Poetry". Although the cover illustrates a girl, not one woman poet/poetess is included in the anthology. Very few women authors are featured at any level of English Literature with Jane Austen being the token authoress at "O" level and "A" level. Only occasionally does one other woman writer appear on the syllabus.

An analysis of twelve reading textbooks by Linda Harland (1985) showed a very disappointing range of female roles. Women's roles were washing clothes, doing housework, preparing food, skipping, and teaching. In contrast, males appeared to play football, drive a car, pilot helicopters, work with animals etc.

A study (Serbin, 1985) of five hundred picture books, found in local libraries and bookshops, showed that traditional sex roles were portrayed in 80% of the story books. Male characters consistently outnumbered females in stories occurring outside the home; males were leaders, had adventures, led expeditions, and were more effective in accomplishing their goals. Females who ventured into achievement or competitive roles were often unsuccessful, or decided to return

to traditional roles.

Baker and Freebody (1987) analysed 163 Basal and supplementary readers in use in the first two years of primary school in Australia. The total for specifically male characters was 968 while the total for female characters was 695. The term Mr appeared 235 times while Miss appeared 159 times and Mrs only 23 times. Where a male and female child character were paired in story series, it appeared that the boy's name was mentioned more often. Boys and girls in the books undertook different activities, as shown by a comparison of the verbs of which boys and girls were exclusively the subjects and objects.

John Abraham (1989) analysed French and English texts from secondary school. The findings showed that there was a predominance of male characters in French textbooks. There were 237 males and 134 females. In the English textbooks many of the female characters tend to be the wives of male characters with occupations.

7.3. Research in France and Belgium

The image of women in French textbooks during the last century was often far removed from the feminist ideal of equality between the sexes (Clark, 1984). An examination of feminine images in textbooks from 1880 -1940 show that there was a dichotomy between a woman's interior and man's exterior role. The Holy Family was the model for family life, demonstrating that "the husband is truly *le chef de la famille*". The father represented authority, force, and work; it was natural for him to command and for others to obey without question. By contrast, the mother tried to imitate Mary, the world's first Christian mother. Destined for a hidden interior life of service to others, woman should not "reverse roles" and

behave like a man (ibid,58).

In 1970 Suzanne Mollo published an analysis of the portrayal of the sexes in reading books used in French primary schools. Working women were heavily outnumbered by housewives. Only a handful of women's occupations were featured: dressmaker, teacher, domestic help, nurse, shopkeeper, shop assistant, waitress and unskilled factory worker. Seventy-nine percent of the main characters were men, 13% women and 8% children. Little boys pursued different activities from little girls, who were often occupied with domestic chores.

Susan Bereaud (1974) carried out a study of the portrayal of the sexes in French children's picture books available to preschool children both at home and at nursery school. Their results confirmed earlier conclusions about school reading books. Whereas male occupations connoted power, prestige, authority and technical expertise, female jobs were generally unskilled and underpaid. There was only one heroine to every five heroes. Females were substantially underrepresented in these books, as well as being generally restricted to domestic and nurturing social roles.

Annie Decroux-Masson (1979) analysed forty-two school textbooks and found that female characters appeared in the role of mother who devotes herself entirely to her children, her husband, her home.

Analysis of primary school textbooks and children's literature in France shows the same results. From twenty French textbooks (United Nations Educational Scientific and Cultural Organization, 1983) women are presented in traditional images. In these books the women have no working life outside the home. Where a woman is not shown as keeping house or bringing up children, she is portrayed as a fashionable lady or an artist.

"All the women are rosy-cheeked but men's physical appearance is seldom described. Just a few references to their strength".
                                                                                                    (ibid, 12)

A French study (Michel, 1982) on sexist stereotypes in textbooks used in primary, secondary and technical secondary school reveals that children have no hope of escaping from the sexist stereotypes. In textbooks used in the *colleges d'enseignement secondaire* (secondary schools), sexism was in evidence everywhere. In the first place, sexism is inherent in the French language, the word for *'man'* being used to designate human beings as a whole. Men have jobs, while women are mothers and housewives waiting at home for their husbands and children. Literary anthologies give little space to women writers.

Bodart (1982) analysed primary school textbooks in Belgium and he found they reinforce the sex role stereotypes. More specifically, he concludes that the nuclear family is presented within a traditional framework regarding the roles. Female characters are connected to domestic activities and the professions destined for men are of higher status and importance than those destined for women.

7.4. Research in Germany, Austria, Switzerland and Russia

Sharon Knopp (1980) carried out a content analysis of the pictures in primary school readers from East and West Germany, for grades one to 4. West Germany was significantly more biased than east Germany. Both countries showed an increasing bias throughout the grades. A male was twice as likely to be pictured alone as a female. In both countries, with one exception, no woman was found driving a car, train, streetcar, or aeroplane. The exception was a witch

driving a jalopy. Men were found in far more occupational roles than were women (84 versus 21). Pictures of families showed the father as the head of the household, clearly the central figure, while the mother was in the background with the children. Inside the house, daughter helped mother with the dishes, while father and son were involved in more intellectual pursuits such as reading the newspaper.

Rosemarie Nave-Herz (1982) carried out a content analysis of textbooks used in the Federal Republic of Germany. In these textbooks the working women were mostly unmarried, single, divorced or widowed. Women were characterised as exhibiting typical female behaviour and manners. Often they were described in relationship to men (eg as the younger sister, as the mother of a hero). On the other hand, men were also portrayed in stereotypical images.

A quantitative analysis of the contents of textbooks at secondary school in Austria by Rosemarie Dorrer (1982) showed that the leading characters of the stories were men or persons of an unspecified sex rather than women. Traditional 'female activities' contained in the stories were always performed by women. Professional activities were traditionally considered to be 'male'. Ninety eight % of the characters involved in adventures were men. Women, if represented at all, behaved very emotionally.

A similar survey by Elisabeth Veya (1982) in Switzerland showed:

1. Women are described less often than men, girls less often than boys.

2. Women play a principal role less often than men.

3. Women are nearly always shown as mothers. Sufficient account is not taken of the fact that a good number of women have a job at the same time as running a household and bringing up children.

4. Women nearly always have traditionally feminine jobs.

5.   In the illustrations the women are always smaller than men.

6.   The only form of social life mentioned is the family in which the traditional division of roles is adhered to.

Mollie Schwartz Rosenhan (1978) examined four children's reading textbooks used in Soviet Russian schools, published in 1971 or 1972. A total of 213 stories were analysed. The results showed that male characters appeared more frequently than females in these stories.

In a Ukrainian study (1982) of reading books for first to third-year classes, numbers of male and female characters were roughly equal. Out of 127 literary works in the reader for the first class, 30 titles referred to women and 36 to men. In the readers for the second class 31 titles referred to women and 34 to men. However, the positive features stressed for each sex were by no means the same: men were portrayed as industrious, courageous, resolute, fearless, gallant, truthful, considerate, active, inventive, quick, intelligent and strict. Traits like kindness and tenderness tended to be attributed to women. Women were affectionate, loving, vivacious, as well as industrious, serious, placid, demanding.

7.5. Research in Korea, India, Pakistan and Arab Countries

Sun-Hee Lim (1986) examined 66 primary school Korean textbooks. On the basis of sex-difference, the number of male characters was 861, while the number of females was 326, which showed a ratio of 2.64:1. About thirty different occupations were shown in the textbooks. 382 male characters appeared and it was shown that they could be engaged in all kinds of occupations except for housewives and nurses. Male characters demonstrated conformity, directive behaviour, statement of information behaviour, and constructive-productive

behaviour while female characters displayed nurturing behaviour, adaptable behaviour, sociable and recreational behaviour as their major characteristics. The total number of characters appearing in illustrations and photographs totals was 8,271; of these 5,407 were male, 2,864 were female, showing a ratio of 19:1.

In a similar research Jung-Ja Kim (1988) examined 37 secondary school Korean textbooks. The analysis of sentences, authors, characters, and the extent of sexual discrimination formed the basis for analysis. The results showed that:

1.   Of the total of 310 authors, 287 were males and only 23 were females indicating that most textbook authors are men.

2.   Among characters portrayed, male adults constituted the majority (73.9%): next were female adults (17.8%), boys (5%), and girls(3.3%).

3.   About 40 kinds of occupations appeared in the textbooks. Occupations for males were diverse, and the proportion of male adults who appeared in the sentences was 71.2%.

4.   Of the 600 illustrations and 508 photographs, males were shown in 62%, females 15.9% and both sexes together 22%.

A content analysis by Zeenatunnisa (1989) carried out in secondary school Pakistani textbooks showed:

1.   83% of the characters were males and 17% females.

2.   84% of subjects in biographies were males and 16% females.

3.   Of the leading characters 66% were males and 15% females.

4.   A total of 42 different occupations were associated with males while only 8 were associated with females.

5.   Women were portrayed more in their social roles of mother, daughter and housewife.

6.   Activities assigned to men were power-oriented. In contrast, activities

associated with women were service-oriented.

A content analysis of 41 secondary school Indian textbooks by Narendra Nath Kalia (1982) showed that in 75% of the lessons males were the leading figures. The males also dominated the biographical lessons in the textbooks. There were only seven biographies of women, compared with 47 of men. The attributes of men and women portrayed in the textbooks were heavily stereotypical. There was a total of 463 occupations in the textbooks. Of these, 391 were filled by males, and only 72 by females. The highest number of females in the Indian textbooks appeared as housewives, an occupation that defines their identity in terms of domesticity and economic dependence on the male.

"The careers suggested for women only complement their traditional roles. The possibility that a woman might have an aptitude for engineering or hotel management or a full business outside the home is never allowed. If she should venture beyond the home, she had better find a situation where she is looked after or where her duties are no better than the extensions of her domestic chores".

(ibid, 184)

Murphy (1984) examined a series of Indian textbooks. She found that Indian stories are essentially patriarchal. A study of the pictures suggests that the visual message is that the woman achieves her triumph and apotheosis through submission.

A study by Kallab, Nasr and Lorfing (1982) examined the image of women and the sex roles attributed to them in 52 Arabic textbooks printed between 1970-1977 used by the majority of primary and secondary schools in Lebanon. Data showed that the most frequent role attributed to females was that of mother (45%). Next in importance was the little girl who is being prepared for motherhood. Grandmother, who had served her term and is passing on the torch

to the next generation, occupied third position in this hierarchy. The working woman, who did not venture too far from the domestic arena, was occasionally assigned to service jobs similar to her home responsibilities such as nursing, housekeeping, dressmaking and baking.

"The most significant finding was that no mother in these references had a job or a profession. Motherhood is presented as a full time job. Three generations, mother, grandmother and child all are playing the role of mother".   (ibid, 136)

A Kuwaiti research group examined school textbooks dealing with Islam, the Arabic language, general sciences, the humanities, military education, psychology and English, as well as a number of children's books. In these textbooks women and girls were absent all together, or are shown very infrequently. The authors of this study point out that men's and women's roles were unequally distributed: the main characters in 75% of the books studied were boys, as opposed to 25% for girls (Kuwait National Committee for Education, Science and Culture, 1983).

A survey of the male and female stereotypes in seventy-nine Arabic textbooks, in use in seven Arab states in 1982, dealt with Egypt, Kuwait, Lebanon, Qatar, Saudi Arabia, Tunisia and Democratic Yemen. In these textbooks written in Arabic, women were depicted in the same stereotyped fashion as in all countries, whether those countries were conservative, progressive, developed, developing, etc. Texts and illustrations in Arabic textbooks described women as confined to the house, the only careers open outside the house being extensions of their household duties (Abu Nasr, Lorfing, Mikati, 1983).

7.6. Research In the Carlbbean, Peru and Puerto Rlco

Kathleen Drayton (1989) analysed 26 secondary school Caribbean textbooks introduced into Caribbean schools in 1978. Of the 401 principal characters in the texts 78% were males as opposed to 22.5% females. Males were in 105 occupations compared to 42 for females. The largest number of females was occupied in household work, child care activities, followed closely by household consumption tasks and social care acts.

A Peruvian study lists the sexist illustrations and texts to be found in twenty-nine of the most widely used textbooks for the six primary classes in Lima. It observed that the overrepresentation of men and boys in the texts and illustrations was characteristic of all levels of primary education. In texts 78% of references to people were references to men, while only 22% were to women, and in illustrations the figures were 75 and 25% respectively. Moreover, the preponderance of male references increased with each successive grade in primary school, beginning with 65% in first-grade textbook illustrations, and rising to 82% by grade six. The world of work, as depicted in Peruvian primary-school textbooks, was peopled mainly by men: of the 104 occupations mentioned, only eight were described as women's jobs, while 79 were described as men's jobs, with 17 deemed appropriate for both men and women (Anderson & Herencia, 1983).

Prida and Ribner (1975) studied 100 books for and about Puerto Rican children and noted that the actual role of Puerto Rican girls was more restricted than that of Anglo-American girls, but the roles portrayed in these books were even more limited than the Puerto Rican female role was in reality. A number of professional women, teachers, nurses, social workers and librarians, were

portrayed, but these were all stereotyped and none was Puerto Rican. Mothers were usually depicted as housewives. Only a few worked in factories or hospitals, some worked as housekeepers, but all of them cooked, cleaned, and cared for others after work.

7.7. Research in Kenya, Zambia and Gambia

Obura examined 24 primary school textbooks commonly in use in 1985 in Kenya. The research team recorded two major findings:

1. Images of females are considerably fewer in number than images of males - women being the category least present in the textbooks, of the four categories of people (men, boys, girls, women).

2. More importantly, the images of females are negative in relation to the images of males. Had the few female images been striking, powerful and positive images they would arguably have had a strong and positive impact despite their infrequency.

"The focus on work/employment images and socio-political images, psychological traits and family roles, produced the finding that females were either absent or portrayed negatively with regard to the former three factors, while their family or material image was persistent but unattractive".

(Obura, 1991, 114)

Adelaide Sosseh (1983) examined Gambian Social Studies and English textbooks. In all the books male characters appeared much more frequently both in the text and in the illustrations. The men participated in a wide variety of activities. Girls were generally portrayed skipping or playing with a ball on their own. The boys played with lorries, cars and tractors. The girls played with dolls. Females were portrayed as helpless and males portrayed as more intelligent and

knowledgeable. In the Social Studies texts, biographies of women and their historical achievements were noticeably missing.

Tempo (1984) examined Zambian textbooks in primary and secondary schools published between 1969 and 1972. She found that the Zambian texts conveyed stereotyped images of girls and women. The text and the illustrations showed the invisibility of women. Even the examination papers reveal the same pattern of male dominance.

Another Zambian survey was based on an analysis of textbooks used at primary and secondary school levels for pupils between the ages of seven and 15. The general finding was that all the books analysed were male dominant. This domination appears both in the numerical overrepresentation of men to the detriment of women, in personality traits, and in the professions and functions assigned to each sex. The men were shown to be leaders and headmasters, doctor and engineers, managers, tugging along with them women who were mere teachers, housemaids, waitresses, nurses, secretaries, and housewives (Michel, 1986, 29).

7.8. Research In Greece

In Greece the research is limited. The first studies that located and dealt with the existence of sexism in textbooks, were mainly works studying the ideological content of the textbooks and referring mostly to older reading books. In the early 80s the change in schoolbooks promised equal treatment to both sexes, influenced possibly by the criticism already exercised.

In Greece this kind of research has begun only recently and it has basically developed into research into primary school reading textbooks. The first

studies with the exclusive subject of the presentation of the two sexes, mainly in the reading books, appeared in the 80's. The studies show a definitely better quantitative and qualitative presentation of the two sexes, but the male continues to prevail in all the fields. The positive point is that the studies resulted in the sensitization of teachers, who now confront schoolbooks more critically, thus suggesting to those responsible changes or amendments of the schoolbooks.

Fragudaki's study (1979) is one of the first pieces of research made in Greece about school readers. This study examines the ideological content of the reading books; it is also examines the presentation of the two sexes. The conclusions deduced are:

1.   The framework of the family presented in the reading books is that of the traditional patriarchal family.

2.   The woman is mentioned only as a housewife.

3.   The working woman is presented as something unnatural. The fact that she works is always depicted as the result of great financial depression.

Myrto Georgiou-Nilsen (1980) studied two series of reading books from the years 1977-79. The strict distribution of roles in the family and the family's patriarchal structure is easily seen. The image of a society which is constituted by two unequals on opposite sides, is projected through the reading books. On the one side are the men, active and productive elements and on the other side the passive members, old people, women and children.

Maria Sakalaki (1984) studied the modern Greek novel from 1900 to 1980. She studied 19 novels and 4 romances that correspond to a total of 5,555 pages. It was found that the main characters are, in the majority, men (73%). Seventy percent of men work while only 32.5% of women do so. Most of the working women belong to the less privileged classes and they work as labourers or as

maids whereas only a minority of men (16%) are simple workers. The characteristics which are attributed to men are: moderation, honesty, intelligence, power and ambition. The characteristics given to women are: modesty, maternal qualities, sincerity and sexual morality.

In his research Georgiou Nilsen (1984) examined the Grimm's tales which have been translated into Greek. Over 60% mention a king as a principal or secondary character. He is the paternal figure with every symbol of authority and power. Omnipotent and omniscient, he is the man of authority both in the family and in the kingdom. The woman's destiny depends upon his decisions. Boys are brave, clever, honest and generous. The girl, even if she plays the central part in the narration, has a decorative rather than a heroic position.

In research about the reading books of the period 1834-1919 Makrynioti (1986) found that those books emphasize the role of maternity, rendering the house the unique place of action for a mother, whereas the man is the leader of the family. Sex is the essential controller of the forms of power and of the role distribution in the family. Man works in order to provide goods for his family, while the woman and the children are financially dependent upon him. A working working is rare, with the exception of the widow or the teacher. The same distribution of roles is valid for the children too: the son is expected to replace the father at work and in providing for the family, and the daughter will replace the mother.

Meni Kanatsouli (1987) examined modern literature for children. She found that the modern messages allow an optimism, since it seems that the young authors do not put separating barriers between the roles of boys and girls. The stereotypes of sexes have been abolished and the "so-called" typical characteristics of the sexes, are equally attributed to both boys and girls. But

there is a difference: though girls may easily be given a typical boyish attitude, it rarely happens the other way round. If there are feminine characteristics attributed to a boy, they will be harmless and not in any way threatening to the manliness of the little boy (p.104)

Ziogou-Karastergiou and Deligianni-Kouimtzi (1981) studied reading books that were used in Greek schools between 1979 and 1980. The results showed a prevalence of the male sex. The number of men and boys is twice that of women and girls. Men are presented acting in their work-place while women are always featured in the house. The most interesting part is that even in the family environment, the leading roles belong to the father. In the reading books, only masculine professions are presented whereas feminine ones do not exist, not even the teacher's profession. Even the writers of the reading books are almost all exclusively men. In a repetition of the research Deligianni-Kouimtzi (1987) examined new reading books of 1982-1983 (reading books still used today) and found that men prevail once again. The female sex is again placed in its traditional area in the house. The woman's presence in the work-place is especially diminished. It has also been noted that there is a broadening in the activities of men in occupations traditionally regarded as female, a fact possibly considered as an innovation by the authors of the reading books, who continue in the majority to be men.

Maragoudaki (1989) examined 105 books for children which are used in kindergartens. A total of 303 passages were analysed. It was found that male heroes prevail by a percentage of 56%. The books project the patriarchal structure of the family. The father is the one who decides, gives solutions and consigns duties. The mother is systematically shown to be busy with the housework and the care of children. The same traditional patterns are also valid

for children. Boys play with cars, bicycles and trains and girls with dolls. Inventiveness, creativity, curiosity and knowledge are attributed to manly characters. In contrast, the feeling of fear and the ability to declare their feelings are attributed to female characters.

In research by Evagelia Kantartzi (1992b) on illustrations in 24 reading textbooks, a total of 1,391 pictures were examined including 4,750 persons. Male characters outnumbered female characters. Male characters appeared as central characters and as famous people. The diversity of occupations assigned to males was quite broad. There were 208 male occupational roles and only 41 female occupational roles.

Politis (1994) studied the language of the reading textbooks used in the primary schools. The results showed that there exists an intense linguistic sexism against women. Women are called or specified by their husbands' names. Women are divided into categories: daughters, young ladies (Miss), virgins and married women (Mrs). The only criterion for the division is their sexual behaviour, something that does not happen with men. The feminine grammatical gender is used only when it refers to the female sex.

7.10. Conclusions

Most of the studies, as we see in the Table 9, were carried out in the decade between 1970 and 1980, firstly in America and then in United Kingdom and other countries. In Greece the studies began in the late 80's and early 90's.

The results of research carried out worldwide, provide us with a disappointing picture of the way the sexes are represented and presented. There is unequal treatment of the two sexes, with the male sex almost always prevailing.

Schoolbooks, children's books, picture-books, literary books, even the books for foreign languages are predominated by the male sex. Both qualitative and quantitative discrimination is evident. Quantitatively men and boys greatly outnumber the opposite sex. Furthermore, the abilities and the characteristics attributed to women are totally contradictory to those characterising men. Men possess qualities assessed more positively in our society. Even regarding professions, men not only hold the greater percentage of the professions but they are also characterised by professions that combine efficient financial status and prestige. The presentation is such that the stereotypes are reinforced.

It is important to mention that the same patterns emerge in so wide a variety of countries. Despite the different social, cultural and financial bases of the countries where the studies were carried out, there is a characteristic accord among all the countries pertaining to this subject. All countries seem to agree that the male sex must dominate always and everywhere.

However the message of the research that has been done on newer books is more reassuring. For example, the research of Kolbe & LaVoie(1981), Collins et al (1984), Purcell & Stewart (1990) indicates that a change has been made, without of course, this implying that the two sexes have entirely ceased to appear in their traditional and stereotypical roles.

Generally the studies done on material produced in the 90's, show an important improvement in the ratio of males and females and also in the presentation of the two sexes. These are mostly studies carried out in America, but we can suppose that similar respective results will appear throughout the world as time goes on.

Table 9: Distribution of Research in Textbooks according to Country and Date

AUTHOR	YEAR	COUNTRY	SAMPLE
Child, Potter & levine	1946	USA	primary school textbooks
Steffire	1969	USA	primary school textbooks
Mollo	1970	France	primary school textbooks
U'Ren	1971	USA	primary school textbooks
Feminists on Children's Media	1971	USA	children's books
Northern Women's Group Ed. Study	1971	Gr.Br.	primary school textbooks
Czaplinski	1972	USA	children's books
Weitzman	1972	USA	children's books
Graebner	1972	USA	primary school textbooks
Nightingale	1972	Gr.Br.	children's books
Lieberman	1972	Gr.Br.	fairy tales
Donlan	1972	Gr.Br.	fairy tales
Britton	1973	USA	primary school textbooks
Oliver	1973	USA	primary school textbooks
Saario, Jalin & Title	1973	USA	primary school textbooks
MacLeod & Siverman	1973	USA	secondary school textbooks
Wiik	1973	USA	secondary school textbooks
Weitzman & Rizzo	1974	USA	primary school textbooks
Hillman	1974	USA	children's books
Lukenbill	1974	USA	literature
Lobban	1974	Gr.Br.	primary school
Frasher & Walker	1975	USA	primary school textbooks
Stewig & Knipfel	1975	USA	picture books
Graham	1975	USA	Dictionary
Gershuny	1975	USA	Dictionary
Heshusius-Gisdorf & Gisdorf	1975	USA	career orientation textbooks
Bereaud	1975	France	picture books
McDonald & Thomson	1975	Gr.Br.	secondary school textbooks
Prida & Ribner	1975	Puerto Rico	children's books
Stern	1976	USA	foreign language textbooks
Gough	1976	USA	primary school textbooks
Marten & Matlin	1976	USA	primary school textbooks
Adams & Laurikietis	1976	Gr.Br.	primary school textbooks
Rauchr	1976	Gr.Br.	English books
Nilsen	1977	USA	children's books
Women on Words and Images	1977	USA	primary school textbooks
Britton & Lumpkin	1977	USA	primary school textbooks
Grund-Slepack & Berlowitz	1977	USA	primary school textbooks
Dayton SChool	1978	USA	children's books

Pottker	1978	USA	primary school textbooks
Rosenhan	1978	Russia	primary school textbooks
St.Peter	1979	USA	picture books
Dorfman & Mattelart	1979	USA	literature
Cadogan & Craig	1979	USA	literature
Lorimer & Long	1979	Canada	primary school textbooks
Decroux-Masson	1979	France	primary school textbooks
Fragoudaki	1979	Greece	primary school textbooks
Knopp	1980	Germany	primary school
Georgiou Nilsen	1980	Greece	primary school textbooks
Engel	1981	USA	children's books
Ferguson	1981	USA	Literature
Rupley, Garcia & Longnion	1981	USA	primary school textbooks
Goodall	1981	Gr.Br.	children's books
Dorrer	1981	Austria	secondary school textbooks
Ziogou-Karastergiou&Deligianni-Kouimtzi	1981	Greece	primary school textbooks
Newman	1982	Gr.Br.	children's books
Bodart	1982	Belgium	primary school textbooks
Nave-Herz	1982	Germany	primary school textbooks
Veya	1982	Switzerland	primary school textbooks
KaliaNarendra	1982	India	primary school textbooks
Kallab, Nasr & Lorfing	1982	Lebanon	primary & secondary school
Edgerton & Brown	1983	Gr.Br.	secondary school textbooks
United Nations Educat. & Scient. Cultural Organization (UNESCO)	1983	France	primary school textbooks
Kuwait National Committee	1983	Kuwait	school textbooks/ children's books
Abu Nasr, Lorfing & Mikati	1983	Arab States	primary school textbooks
Sosseh	1983	Gambia	English textbooks
Collins et al.	1984	USA	children' books
Murphy	1984	India	school textbooks
Tempo	1984	Zambia	primary & secondary school
Georgiou Nilsen	1984	Greece	fary tales
Sakalaki	1984	Greece	literature
Kinman & Henderson	1985	USA	children's books
Hodgeon	1985	USA	picture books
Harland	1985	Gr.Br.	primary school textbooks
Serbin	1985	Gr.Br.	picture books
Obura	1985	Kenya	primary school textbooks
Michel	1986	France	primary & secondary school

Michel	1986	Ucraine	primary school textbooks
Anderson & Herencia	1986	Peru	primary school textbooks
Sun-Hee Lim	1986	Korea	primary schools textbooks
Makrynioti	1986	Greece	primary school textbooks
Dougherty & Engel	1987	USA	children's books
Williams et al.	1987	USA	picture books
Kanatsouli	1987	Greece	children's books
Deligianni Kouimtzi	1987	Greece	primary school textbooks
Jung-Ja Kim	1988	Korea	secondary school textbooks
Gonzalez-Suarez	1989	USA	primary school textbooks
Abraham	1989	Gr.Br.	secondary school
Drayton	1989	Carribbean	primary school textbooks
Zeenatunnisa	1989	Pakistan	secondary schools textbooks
Kokkini	1989	Greece	primary school textbooks
Makrynioti	1989	Greece	children's books
Peterson & Lach	1990	USA	children's books
Trousdale	1992	USA	picture books
Measor & Siker	1992	Gr.Br.	fairy tales
Harwood	1992	Gr.Br.	Latin texts
Kantartzi	1992	Greece	primary school textbooks
Agee	1993	USA	picture books
Martinez & Nash	1993	USA	picture books
Politis	1994	Greece	primary school textbooks

CHAPTER 8

METHOD OF ANALYSIS

8.1. Aim of Study

The results of earlier research indicate that the traditional beliefs about the two sexes engender a wide range of discrimination and inequalities at women's expense, in the field of family, work and education in spite of the institutional recognition of equality.

My research has, as its aim, to investigate the way in which the two sexes are presented in school manuals. The reason which induced me to choose the studying of school textbooks involves many factors. The first factor is that sexism in textbooks is one of the most visible forms of sexism and is therefore easy to isolate and control. Another factor is the influence that books exercise on the formation of opinions. School textbooks, as we have seen, are very influential tools, particularly in the primary school, when children have limited experience and limited critical thought and they act as a catalyst in influencing children's behaviour. The power of education in this period should be taken seriously. That is why I chose primary school textbooks for my study. A third reason is that I wanted to investigate the extent to which the recent proclamations about equality of the sexes have influenced the representations of the sexes in the content of books. These books have been advertised as a product of a fundamental change and modernization of the conservative social beliefs that prevailed until then in schoolbooks. What has really changed in these books? For these reasons, this study aims to analyse how gender roles are expressed in

Greek primary schoolbooks. Readers were not included since they have already been the focus of several pieces of research, as I have already mentioned to chapter 7. There has, however, been no research done on the rest of the books, so I hope that this research will complete and illuminate the reality as it is shaped through daily instructional action.

In order to comprehend Greek instructional conditions better, the reader should take into consideration the following: In Greece there prevails a strictly centralised educational system. All the decisions are taken by the Ministry of Education. The Ministry of Education defines when new school books should be published and even generally defines their content by appointing groups of educators to write them. Only one series of books is produced and this is used by children throughout the country. Often books are written according to the basic philosophy of the dominant political party. The contemporary books that I have examined were produced under the aegis of the political party that came to power in 1981 and the books were published gradually from 1982 onwards.

8.2. Method of Content Analysis

8.2.1. What Is Content Analysis?

The method selected is that of content analysis. Content analysis is a method used basically in social sciences but in other sciences also (Filias, 1977). Content analysis poses questions that aim at the quantitative classification of the content according to a category system, designed to supply data on particular aspects of the content of the text.

According to Bererlson:

"Content analysis is a research technique for the objective, systematic, and quantitative prescription of the manifest content of communication".   (Berelson, 1952,8)

According to another definition:

"Content analysis is any technique for making inferences by systematically and objectively identifying specified characteristics of messages"   (Holsti, 1968,601)

There is no general definition of content analysis but there are some basic characteristics. Among the characteristics of content analysis are those of objectivity, system, and generality. The requirement of objectivity demands that the categories of content analysis should be defined so precisely that different analysts can apply them to the same body of content and secure the same results. In a systematic analysis the inclusion and exclusion of content or categories is done according to consistently applied criteria of selection; this requirement eliminates analysis in which only materials supporting the investigator's hypotheses are examined. By their generality the findings must have theoretical relevance (Berelson, 1952,16; Holsti, 1968, 598).

Content analysis is useful whenever the problem requires precise and replicable methods for analysing those aspects of symbolic behaviour which may escape casual scrutiny (Holsti, 1968, 602). The uses of content analysis are ordered under major headings which progressively refer to the characteristics of communication content, the causes of content, and the consequences of content (Berelson, 1952,26).

For the application of content analysis, the procedure followed is:

1.   Once the subject-problem is defined, the relative sources have to be found. If it is not possible to study all the sources, a sampling is planned.

Here it is important to pay attention both to the size of the sample and to the method of sampling, in order to have valid results.

2. The next step is the definition of units of analysis. For this purpose, a definition is required of the record unit, the specific segment of content that is characterised by its place in a given category.

3. The classification of the material in categories of content analysis, is the next step. Particular studies have been productive to the extent that the categories were clearly formulated and well adapted to the problem and to the content. (Berelson, 1952,147)

Units, frequently used in content analysis are: the word, the theme, the character, the paragraph, the sentence, or other grammatical units (Holsti, 1968,647).

8.2.2. Sampling

The first problem that arises in the process of sampling is distinguishing the most representative sources; books, newspapers or magazines. The selection can be made at random; But even when the sampling has been made, there is difficulty in choosing the ones that will be used. Sampling is necessary, unless all the sources are available for use.

In the present research, the subject defined the sources. So all the primary textbooks were used except reading books, as we have seen.

In total 24 books were studied: 4 religious education textbooks, 4 history textbooks, 2 science textbooks, 6 mathematics textbooks, and 8 for social sciences covering the primary age-range. For the application of content analysis this is the procedure that was followed:

8.2.3. Units of Analysis

Since the objective reason of the study was to investigate the way the sexes were depicted in the schoolbooks, in the forming of analysis units,

consideration was given to theoretical frameworks discussed in the research bibliography regarding the differences of the two sexes, and also the social stereotypes and the systems of analysis units used in similar studies. Of course, the final formation was defined mainly by the material that we had to analyse, so the system of categories was derived largely from the material itself.

After a thorough and successive study of the material, the selection of categories was made. Before this, a pilot study was performed on the series of books *Ourselves and Our World*, in order to test how satisfactory the categories of analysis were. Indeed some categories were withdrawn while others were added. Every attempt was made in order to have the most inclusive categories, that is to include everything relating to the aim of the research, that could be classified into the categories.

The categories of behavioural traits were the only ones for which there were no exactly defined subcategories. The trial proved that impossible since the material derived from different books each time described new behavioural traits that should be included. Nevertheless, since it is a very wide category, it was divided into three subcategories: social, intellectual and emotional behavioural traits. Behavioural characteristics were also categorised into masculine and feminine behavioural traits.

After the system of analysis was finalised, categorization of the material followed. The analysis of the books was performed separately for each subject, because the philosophy of the books relating to each subject and their content were totally different. The selection of categories allows the quantitative and qualitative analysis and evaluation of the books, which was carried out separately and is reported each in its own chapter. The following Units of Analysis were defined:

1. The appearance and frequency of males and females in textbooks

1.1. Women and men in text

1.2. Women and men in titles

1.3. Named characters in text and in titles

1.4. Famous persons in text and in titles

1.5. Principal roles

Quantitative analysis of the content i.e. there are data referring to the number of boys-girls, men-women appearing in the schoolbooks (both in text and titles)

2. Social references

2.1. Marital status of men and women

2.2. Family status of men and women

2.3. Occupations in text and titles

2.4. Type of environment: outdoors, home, school, work.

In this category apart from the quantitattive data there is a designation of the roles of both men-women (husband-wife etc.)

3. Linguistic content

3.1. Number of pronouns

3.2. Number of attributes

Analysis of sexism inherent in language (vocabulary-grammatical structure)

4. Activities

4.1. Domestic care activities

4.2. Child care activities

4.3. Leisure activities

4.4. Political and social activities

In this category through an analysis of activities there is a determination of roles attributed to men and women (for example mother-father, housewife-breadwinner)

5. Behavioural traits: social, intellectual, emotional.

There is mainly a qualitative analysis with the comparison of the characteristics and qualities attributed to men and women.

By studying all these aspects I believe that an overall and complete view of sexism as it is appears in the schoolbooks will be obtained.

The analysis follows in chapters 9-13.

CHAPTER 9

THE IMAGE OF WOMEN IN RELIGIOUS TEXTBOOKS

9.1. The Image of Woman in Religion

What is the image and identity of women in the textbooks for religious studies? Which role models and characteristics are associated with them? What is the image of women in Christian tradition?

Religion was always an important contributive factor in culture. Since religion has the capacity to create meanings, images and models, it can be an ideological process for the construction of gender. Religious symbols shape a cultural ethos, defining the deepest values in the society. Religion is a system of symbols acting to produce powerful and long lasting attitudes and motivation in people of a given culture. Symbols have both psychological and political effect because they create the inner conditions that make people feel comfortable or accept social and political arrangements that correspond to the religious system (Ruether, 1985, 274).

Religion is one of the most important sources in shaping and enforcing the image and the role of women in culture and society. We must examine carefully the kind of image a particular religion has created and produced through generations and how far these images could contain inherent contradictions. Religion plays a significant role in women's oppression. The messages taken from worldwide religions agree with dominant cultural

injunctions, but they are presented by the religion as God's commands. Religion thus serves as an important vehicle in the internalisation of cultural codes and at the same time makes them more rigid and difficult to alter.
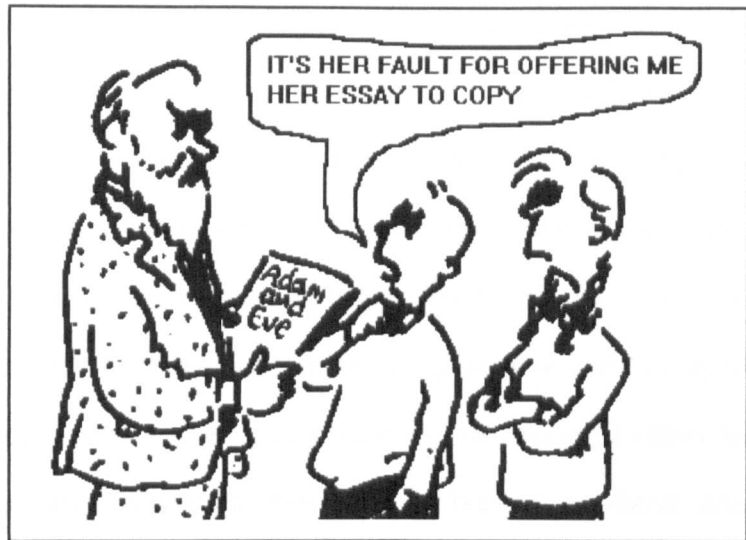
Source: Hanlon, 1992, 190.

Systematic investigations and surveys demonstrate that sexist bias runs through the whole religious tradition in the works of various theologians and periods of theology (Weidman, 1984, 17). Sexism results in the exclusion of women from social development in the valued sphere of cultural formation and leadership. Religion makes sexism appear the norm in human relations, in the order of creation and in the relation of God with humanity and history. The intertwining of sexism with religion means not only that women and their experience have been excluded from the shaping of the public culture of religion, as well as both theology and cult, it also means that the religious codes, cult and symbolic patterns have been shaped by an ideological bias against women.

Judaic-Christian tradition was born in a society patriarchal in structure and outlook, with men having political, religious and social leadership and women having supportive and subordinate roles. The origin of the term *"patriarchy"*, which literally is an ecclesiastical one, means the rule of the father. Broadly defined, patriarchy is the power of man over woman,

depending on specific socioeconomic and historical contexts. Patriarchy is a system of social structures and practices in which men dominate, oppress and exclude women (Walby, 1990,20). The family, the school, the law and the religion reinforce and reproduce patriarchy through the mechanism of ideology. Patriarchy is especially tied up with deep religious roots because of the inherent patriarchal structure of all historical religions. Today the word is used to describe the situation of women, their dependence and subordination to fathers, husbands, brothers and all men in positions of power, privilege and influence. Not only did the patriarchal authority of the husband determine the scope of the female dependant's activities, but also, current interpretations strongly insist that it also extended its power over the minds of women as well (Ezell, 1987, 4).

The patriarchal system has undergone significant changes throughout its history but it has been the dominant social and political structure in the last five thousand years. Its classical expression is found in Aristotelian philosophy, which has decisively influenced not only Christian theologies but also western culture and political philosophy.

Sexual stereotypes, in which women are classified as passive, dependent, irrational, incapable of intellectual work or leadership, are rooted religiously and are difficult to dislodge. The image and nature of women are deeply rooted in a dual perspective that divides and opposes each other, body and mind, nature and spirit, women and men, earth and heaven. The earlier religious texts, before the Bible, have reflected a holistic view in which opposites existed, but separately. About the year 1000 B. C. religion reflected a two-fold world-view in which the concepts that had been bound together were divided and hierarchically ordered. Males appropriated the positive sides

of each duality to themselves and associated the negative aspects with women (Silverstein, 1993, 145).

The traditional system of male priests is rooted in sexist and hierarchical patterns that stand in contrast with feminism. Clericalism, by definition, monopolises the ministry as the position of an elite male caste and reduces people to dependency. The Bible has been used against women's demand for political and ecclesiastical equality, portraying them as acting against God's will. Women cannot represent Christ in the leadership of the church and they have only a passive and silent role. "Since they have no permission to speak." (1 Corinthians). "If they want to inquire about anything, they should ask their husbands at home", "Wives obey your husbands as you should obey the Lord" (Col. 3:18).

9.2. Religious Education Textbooks

9.2.1. Review of Literature

Men are predominant not only in religion but even in the religious studies textbooks. Men appear in almost every conceivable role. Women exist only in terms of their relationships with men and children. Men are credited with having positive male features, while women appear to have been lacking these male qualities, possessing their own feminine virtues, which men supposedly lack. Men are those who take on social, professional or political responsibilities and possess the leading roles. They become famous and important individuals-eponymous heroes. They are apostles, prophets, hermits, martyrs and holy persons. The male sex is prevalent and not only quantitatively: it is the sex that acts, directs, guides and has the leadership roles and high status jobs. Man is always the head of the family, the oppressor and protector of women and

children, possessing in this way two roles that reflect the very complicated nature of domination and dependence in the man-woman relationship.

Women hold the subordinate positions. They are presented in negligible and supplementary roles. They are dependent on men in every sphere of life, humble, passive or obedient. The most important role of women, the role of a mother, is symbolised by Mary as the Mother of God. For the Orthodox Church Mary is the Theotokos, the mother of God, the mother of all living human beings. But the stereotyped role of the Virgin has encouraged women to be meek and receptive. She has always been ambiguous figure and there is a dichotomy in her roles both as virgin and mother.

"The idea that the deification of the Mother of God signifies an acknowledgment of the high status of women is an illusion. Outside her reproductive, essentially biological, function she has no other social role".   (Yulina, 1993, 61)

In modern times the biblical figure of Mary has been interpreted more positively by all Christians as the model of faith, radical obedience and of active participation in God's world of liberation.

9.2.2. Greek Religious Education Textbooks

Greek Orthodox Christian education in primary schools aims at helping children to understand the Orthodox Christian tradition and the basic elements of the Christian way of life. Orthodox Christian education also aims at creating in children's minds an Orthodox Christian conscience and at helping them to progress in their relationship with God, who is deemed as Creator of the Universe and Father of all living creatures.

More specifically, the course of Orthodox Christian education aims at helping children in the following way:

- to make them faithful to the Orthodox way of life and to help them adapt to the spiritual and traditional way of life.

- to help them to understand the messages of the Gospels.

- to create good relations with the environment and other people at national and international level by following the ethical and spiritual messages from Orthodox Christian education (OEDB, 1993, 5).
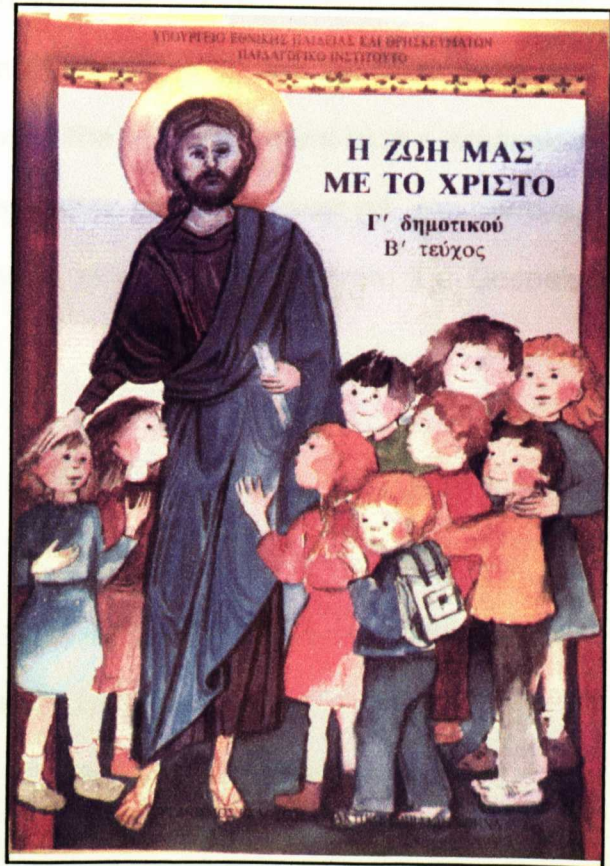
Illustration from the cover of the Religious Textbook, 3rd year primary school, 1992.

Religion is taught twice a week in the last four years of the primary school. In the primary school, religion is taught by the class-teacher and in the high school by a teacher who has completed special studies in the faculty of Theology.

In the first two years of primary school there are religious references in the textbook "Ourselves and Our World". There are references to religious holidays such as Christmas, the Epiphany, the Annunciation or to holy sacraments such as marriage, baptism or to religious education (a child is praying, the family goes to church).

There are four textbooks, a separate book designed especially for each year and most of the subjects have been taken from the New Testament. The

textbooks used in the of 3rd and 4th years of primary school have similar themes, the life of Jesus Christ but in the textbook of the 3rd year there are short simple stories. The textbook used in the 5th year refers to the expansion of Christianity, the life of the Apostles, saints, prophets, martyrs and hermits. Finally the textbook used in the 6th year includes extracts from the Gospels with extensive discussion and analysis.

9.3. Findings and Discussion

As we have seen in Chapter 8, the textbooks were analysed according to preset formulas. The results of the analysis appear below.

9.3.1. Appearance and Frequency of Male and Female Characters

What is remarkable is that the male sex dominates in all four books. Looking at the tables with quantitative elements, it is obvious that males are predominant. The total number of males appearing in texts is 9,718 (93.9%) and 268 (90.3%) in titles (Table 10, p.176). The most important image is in fact the absence of women. The lack of female images in books indicate a gross under-representation of women and this amounts to a distortion of demographic reality.

In the last two years the appearance and frequency of female characters decrease. It can be said that the higher the level, the more academic the subject becomes. Male characters appear increasingly as we move upwards through the books for each level. Apparently, the older the children, the more likely the authors are to present male dominated stories. Of course, this is something to be expected because in the higher levels the stories are from the Bible and simply reflect the male-centredness of the

patriarchal society from which they sprang.

Table 10. The Appearance and Frequency of Males and Females in Religious Education   Textbooks.

YEARS	3	4	5	6	TOTAL
Women in text	156	158	140	171	625
%	13.4	10.7	3.2	5.2	6.1
Men in text	1,007	1,308	4,272	3,131	9,718
%	86.6	89.3	96.8	95	93.9
Women in titles	1	10	12	6	29
%	7.2	15.6	7.2	11.7	9.7
Men in titles	13	54	156	45	268
%	92.8	84.4	92.8	88.3	90.3
Girls in text	87	12		7	106
%	37.6	70.6	–	46.6	39.8
Boys in text	144	5		8	157
%	62.4	29.4	–	53.4	60.2
Girls in titles		1			1
%	–		–	–	
Boys in titles		2			2
%	–		–	–	
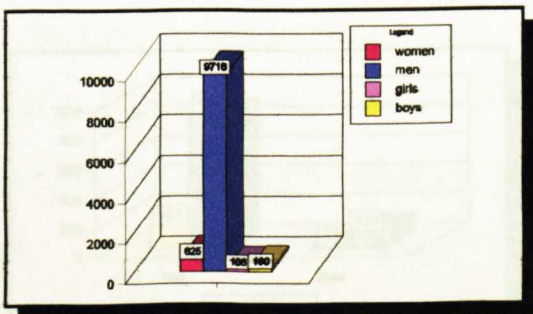
Figure   4. Appearance of Males and Females in Text.
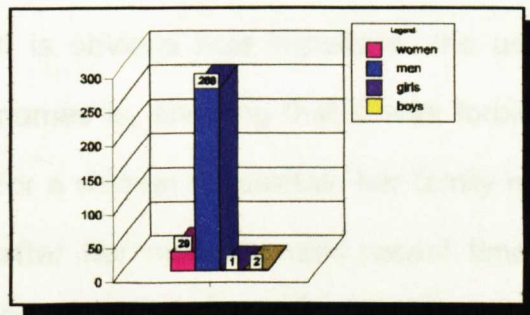
Figure 5.   Appearance of Males and Females in Titles.

9.3.2. Appearance and Frequency of Named Characters

According to Table 11 (Named Characters) there is an unequal distribution of male and female names. Men's names, excluding the name of Jesus Christ, appear 920 times (85.9%) while women's appear 151 times (14.1%). In titles we find the appearance of 118 male names and only 7 for females.

Table 11. The Appearance and Frequency of Males and Females in Religious Textbooks (Named Characters, Famous Persons, Principal Roles)

YEARS	3	4	5	6	TOTAL
Named characters in text **W**	71	29	37	14	151
%	30.1	22.3	3.9	5.6	14.1
Named characters in text: **M**	165	101	419	235	920
%	69.9	77.7	96.1	94.4	85.9
Named characters iin titles **W**		1	5	1	7
%	–	11.2	5.2	5	5.6
Named characters in titles **M**		8	91	19	118
%	– –	88.8	94.8	95	94.4
Famous women in text	25	17	21	6	69
%	13.4	10.6	6.6	2.2	7.3
Famous men in text	161	144	297	272	874
%	86.6	89.4	93.4	97.8	92.7
Famous women : title		2	7		9
%	–	5.8	6.4	–	5.2
Famous men : title	12	32	101	19	164
%	100	94.2	93.6	100	94.8
Principal roles **W**	13	8	9	5	35
%	7.1	11.2	9.3	7.1	8.3
Principal roles **M** %	170	63	87	66	386
	92.9	88.8	90.7	92.9	91.7
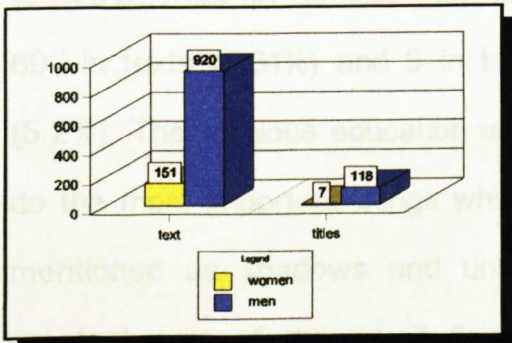
Figure 6. Named Characters in Text and Titles

It is obvious how important the use of names is, knowing that it was forbidden for a woman to maintain her family name after her marriage until recent times In Genesis 1 and 2, God names and divides the universe. He also creates and names *"man"* who inherits His power to name other living creatures and have dominion over them. In Genesis 2 *"Adam"* the first man, not only names all the living creatures before woman is created, but also names her. Woman is defined by man, but not given poetic powers to name their shared world. The naming power goes from God to Adam (Gershuny, 1977, 108).   The father's family name is given to every member of the family indicating that the family belongs to the father. "The family of Noah, the family of Abraham," (3,36). The boy gets his name from his father.

"All the relatives were gathered at Zacharia's house and suggested that the child should be must named after his father's name".   (4,17)

9.3.3. Appearance and Frequency of Famous Persons

In the religious education textbooks the male sex is the most important in matters of history, life and action and appears as the centre of the universe.

The most important persons, in the majority, are men. So, as shown in Table 11 (Famous Persons), we find 874 famous men in texts (92.7%) without including God and 164 in titles (94.79%) while for females there are 69 in texts (7.31%) and 9 in titles
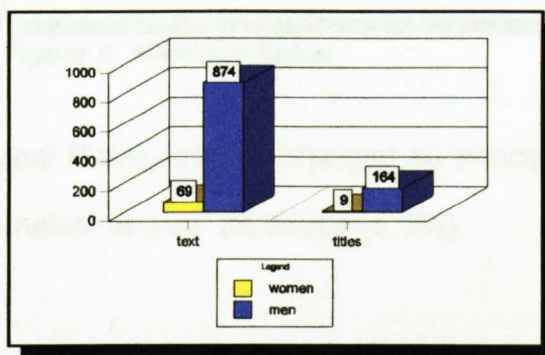
Figure 7. Famous Persons in Text and Titles.

(5.2%). The religious education textbooks reproduce the stereotype that men do the most important things while women have a passive role. Women are mentioned as shadows and unknown features. It is remarkable that the greatest part of the small figure of 7.31% for important women in the textbooks, is due to maternity. Mary is the most important woman not because of herself as a human being but as mother of God. Out of 69 examples of important women, 41 are of Mary as the mother of Jesus. She cannot be identified as divine in her own right; If she is the "mother of God" she is not "God the Mother" or an equal footing with "God the Father" (King, 1989, 162).

Famous male characters included are: apostles, prophets, martyrs, saints, priests, kings, emperors, heroes and authors.

9.3.4. Appearance and Frequency of Principal Characters

Male characters have a great importance as principal characters, while female characters appear in fewer important roles. A leading character is defined as prominent the one that takes the decisions and the one around whom the plot is
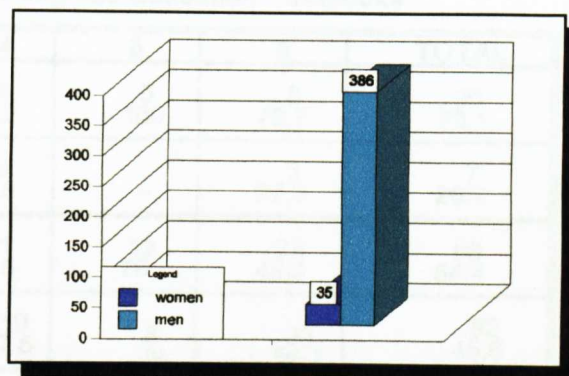
Figure 8. Principal Roles.

revolving. According to Table 11 (Principal Roles) males emerged as principal characters in 386 cases (91.7%) and females in only 35 cases (8.3%).

9.4. Social References

9.4.1. Marital and Family Status

The term *"social reference"* refers to the status traits attributed to male and female characters in textbooks. Sexist stereotypes appear in religious education texts which portray men and women differently in terms of their marital and family status. As shown in Table 12 (Marital Status) 73.1% of female characters have their marital status shown while only 26.9% of male characters have it referred to. There are also many references to widows but none to widowers and very often widows are referred to in relation to orphans (4,91)[*]. In the textbook used in the 4th year p.57 there is a reference to the raising of the widow's son. The woman appears nameless but she is defined by her marital status.

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[*] The first number indicates the level book, the second the page number

Table 12. Social References in Religious Education Textbooks

YEARS	3	4	5	6	TOTAL
Marital status W %	2 66.6	4 57.2	5 100	8 79.7	19 73.1
Marital status M %	1 33.4	3 42.8	–	3 27.3	7 26.9
Family status W %	35 56.4	21 52.5	19 76	23 43.3	98 54.4
Family status M %	27 43.6	19 47.5	6 24	30 56.7	82 45.6
Occupations in text W %	8 24.2	1 0.9	7 2.6	1 0.8	17 3.1
Occupations in text M %	25 75.8	103 99.1	262 97.4	112 99.2	502 96.9
Occupations in title W %	–	–	-	-	–
Occupations in title M %	22 100	9 100	5 100	4 100	40 100

W=women M=men
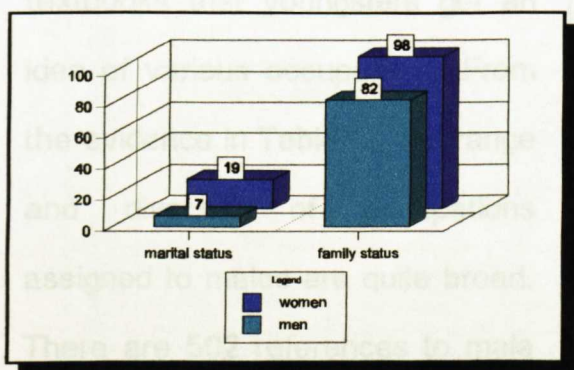
Figure 9. Social References: marital and family status.

This phenomenon can be related to the fact that in the traditional patriarchal society of the Bible the position of women is determined by the protection of their fathers, husbands or brothers and their role is defined by whether they are married or not. Female characters have marital status indicated more frequently than male characters because of the stereotyped ideas in the stories in the school textbooks that reveal the fact that the position of women is defined and their role is restricted by their marriage. The religious education textbooks convey a sexist stereotype that women's status is linked to marriage while men are independent.

The frequent definition of women characters only in terms of their role in the family (usually as mothers) is another indicator of sexism, while male characters are only occasionally portrayed as fathers. This depiction of women is denying human worth to those women who find fulfilment beyond motherhood, such as those who take on social, professional or political responsibilities, or those who have two roles: one being in the family and the other in their chosen profession. According to Table 12 (Family Status) there are 98 women (54.4%) with defined family status and 82 men (45.6%). The presentation of God as a father is the cause of the high percentage of males presented as fathers.

9.4.2. Occupational Roles

It is mainly through school textbooks that youngsters get an idea of various occupations. From the evidence in Table 12 the range and diversity of occupations assigned to males are quite broad. There are 502 references to male

Figure 10. Social References: occupations.

professional roles (96.9%) and only 16 of female ones (3.1%). In the titles the total of 40 references belong exclusively to male professional roles.

About 68 different occupations are shown in the textbooks. As shown in the Table 13 (List of Occupations assigned to Male Characters) 59 occupations are assigned to male characters.

Table 13. List of Occupations In Religious Textbooks Assigned to Males

	YEARS	3	4	5	6	TOTAL
1	Priest/High-Priest	26	19	27	11	83
2	Emperor	4	1	37	-	42
3	King	8	9	3	12	32
4	Bishop/Archbishop	-	-	28	2	30
5	Soldier	8	8	9	-	25
6	Officer/Commander	4	4	16	1	25
7	Magistrate/Prince	1	5	12	6	24
8	Teacher/Professor	8	-	8	6	22
9	Patriarch	1	1	14	5	21
10	Custom house officer	-	7	2	10	19
11	Clerk/Secretary	-	9	2	8	19
12	Shepherd	2	5	6	4	17
13	Servant	1	9	1	5	16
14	Monk	-	-	13	-	13
15	Metropolitan/Archimandrite	-	-	3	9	12
16	Slave	-	1	4	7	12
17	Thief	2	6	2	-	10
18	Fisherman	2	1	6	1	10
19	Author	2	-	7	-	9
20	Jurist	-	3	3	3	9
21	Doctor	4	-	3	1	8
22	Merchant	1	-	6	1	8
23	Missionary	-	1	5	1	7
24	Executioner	-	1	4	-	5
25	Farmer	-	3	-	2	5
26	Worker	1	1	3	-	5
27	Deacon	-	-	4	1	5
28	Guard	-	2	2	-	4
29	Hotel keeper	2	1	-	1	4
30	Astrologer-magician	-	1	3	-	4
31	Elder	-	-	4	-	4
32	Painter	2	-	-	1	3
33	Poet	1	-	2	-	3
34	Member of Synagogue	-	-	-	3	3
35	Carpenter	1	1	-	-	2
36	Musician	-	-	1	1	2
37	Tent maker	1	-	1	-	2
38	Orator	-	-	2	-	2
39	Philosopher	-	-	2	-	2
40	Pope	-	-	2	-	2
41	Captain/Sailor	-	-	2	-	2
42	Pasha/Sultan	-	-	2	-	2
43	Artist	-	-	-	2	2
44	Historian	-	-	1	-	1
45	Sculptor	-	-	1	-	1
46	Mayor	-	-	1	-	1
47	Architect	-	-	1	-	1
48	Prime Minister	-	-	1	-	1
49	Minister	-	-	1	-	1
50	Theologian	-	-	1	-	1
51	Cardinal	-	-	1	-	1
52	Caesar	-	-	1	-	1
53	Adviser	1	-	-	-	1
54	Verger	1	-	-	-	1
55	Football player	1	-	-	-	1
56	Waiter	-	1	-	-	1
57	Beggar	-	1	-	-	1
58	Land-owner	-	1	-	-	1
59	Member of parliament	-	-	-	1	1

Male characters are shown as being able to engage in all kinds of occupations, most of which, when assigned to men, rank higher on prestige and power. Males are high level professionals, holding high executive positions. Women not only have a restricted choice of employment, but they are also prevented from reaching to the higher levels in any field.

In contrast to the diversity and range of work available to men, only 9 occupations were assigned to women (Table 14).

Table 14. List of Occupations in Religious Education Textbooks Assigned to Females

	YEARS	3	4	5	6	TOTAL
1	Teacher	6	-	-	-	6
2	Queen	-	-	3	-	3
3	Nun	2	-	-	-	2
4	Princess	-	-	1	-	1
5	Merchant	-	-	1	-	1
6	Servant	-	-	1	-	1
7	Empress	-	-	1	-	1
8	Missionary	-	-	-	1	1
9	Doorkeeper	-	1	-	-	1

The range of occupations assigned to women is extremely limited. The image of a broad spectrum of occupations available to males in the adult world offer boys a better foundation on which to built up their future career plans and a sense of freedom to choose. These images help boys to broaden their horizons about the world and about themselves.

9.4.3. Type of Environment

According to the traditional separation based on sex differences, males play a predominant part in public life, while women do likewise in private. The distribution of places where men and women appear follows the traditional principle of role allotment. As shown in Table 15 the greatest number of male appearances is outdoors (161) followed by their place of work (40). Women appear mostly going to church as though this were the only outdoor place they

should be associated with and there is no incidence of them appearing in a professional capacity. This misrepresentation means that children are led to believe that a woman's place is in her family home and man's place is in his place of work.

Table 15. Social References in Religious Education Textbooks. Type of Environment.

YEARS	3	4	5	6	TOTAL
Women outdoors %	15	10	4	5	34 / 17.4
Men outdoors %	35	54	40	32	161 / 82.6
Women at home %	11	1	1	–	13 / 48.2
Men at home %	9	5	–	–	14 / 51.8
Girls at school %	5	–	–	–	5 / 41.7
Boys at school %	7	–	–	–	7 / 58.3
Women at work %		–	–	–	–
Men at work %	22	9	5	4	40 / 100
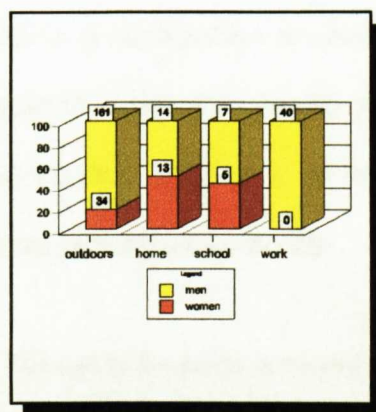
Figure 11. Social References: type of environment.

9.5. Linguistic Content

9.5.1. Number of Pronouns

The use of language is powerful in constituting the world as we experience it. Throughout human history language has developed sex-biased usages. It is therefore not surprising that women could not keep their names or status and they were dependent on men.

"In our society only men have real names in that their names are permanent and they have accepted the permanency of their names as one of the rights of being male... Practically it means that women's family names do not count and that there is one more device for making women invisible. Fathers pass their names on to their sons and the existence of daughters can be denied when in the absence of a male heir it is said that family dies out".

(Spender, 1980, 24)

Language is one of the most significant instruments in establishing communication and thereby in making a community viable or in preventing its existence by reinforcing the boundaries. The image and the symbols related to women are deeply rooted in our language, so we must be aware of the dynamics of the language and the way it may be used to express ideas.

The excessive use of the masculine gender to denote all individuals, male and female making up the human race leads to a denigration of women by making them invisible. A masculine noun is used to refer not only to male but to female as well. In a hierarchical and patriarchal society it is not a coincidence that the language of women is held to be lacking in authority.

"The language of sacred texts does not just state the facts. The use of language in sacred texts has to be understood in relation to the "mystery" with which it is associated. People do not enter into human relations independently of what they say and think. Language has more to do with relations than simply presenting them as laws to be obeyed. When the sacred texts expressed their laws on male-female relations they had prophets, poets and apostles to write them".

(Harrison, 1991, 95)

God is not to be referred to in sexual terms. For the Judaic-Christian tradition God is to be considered beyond all names and sexual divisions. But the actual language that we use every day conveys a different message and gives the impression that God is thought of in masculine terms only. The nouns, pronouns and verbal forms have reinforced the picture of God as male. God is referred by the pronoun "He". He is Father, Lord, Master, King, Judge. The most common Greek word for God (Theos) is masculine.

The predominant number of male characters over female characters becomes sharply apparent when we analyse the frequency of the words (nouns and pronouns) used in texts to designate each sex. The findings reveal a noticeable preponderance of masculine pronouns and adjectives over their feminine equivalent.

Table 16. Linguistic Content in Religious Education Textbooks

YEARS	3	4	5	6	TOTAL
Number of pronouns assigned to females	107	101	87	127	422
%	14.6	8.7	9.3	3.6	6.6
Number of pronouns assigned to males	626	1,050	852	3,429	5,957
%	85.4	91.3	90.7	96.4	93.4
Number of attributes assigned to females	27	23	30	15	95
%	28.2	17.1	10.4	5.6	12.1
Number of attributes assigned to males	69	112	257	256	694
%	71.8	82.9	89.6	94.4	87.9

As shown in Table 16 the total number of masculine pronouns is 5,957 (93.4%) while the number of feminine pronouns is 422 (6.6%). The attributes assigned to males number 694 (87.9%) and to females 95 (12.1%).
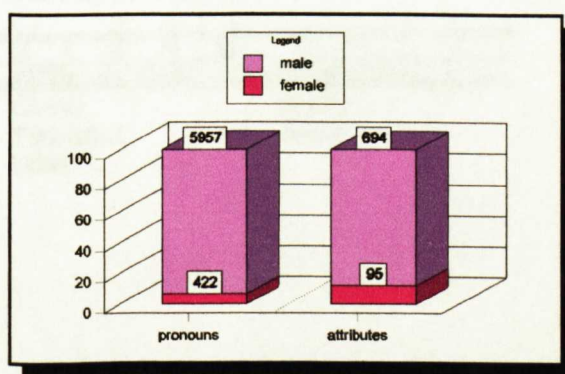
Figure 12. Linguistic Content.

9.5.2. Number of Attributes

The attributes assigned to men and women can be divided into three broad categories: social, intellectual and emotional (Table 17).

Men are wise, intelligent, educated. A broad range of positive character attributes are also associated with males. They are faithful, honest, fair, sinless, brave, worthy, victorious and holy. But a list of negative attributes

such as fanatic, sinful, prodigal, unjust, tyrannical, avaricious is also assigned to men.

The attributes assigned to women are limited as is shown in Table 17. They are beautiful, sweet, pretty, dependent and frightened. These attributes emphasise the passive dependency and the lower status of women. These images are internalised by girls, creating psychological addiction.

In the portrayal of women the attributes focus on one aspect of the human personality, ignoring the attributes related to the intelligence

Portraying women in stereotypes helps the socialisation of girls in domesticity since these are the qualities required for dependent, homely roles. Highlighting men as wise, intelligent and brave socialises the boys for outdoor activities related to economic production and positions of power.

Table 17. List of Attributes Assigned to Males and Females

MASCULINE			
SOCIAL		INTELLECTUAL	EMOTIONAL
Ambitious	Great	Clever	Happy
Anxious	Hostile	Educated	Joyful
Avaricious	Hurried	Wise	
Benefactor	Independent		
Conqueror	Kind		
Correct	Leader		
Courageous	Mad		
Dangerous	Mature		
Daring	Oppressive		
Experienced	Patriot		
Famous	Powerful		
Fighter	Proud		
First	Responsible		
Founder	Specialist		
Free	Tough		
Friend	Tyrannical		
Famous	Victorious		
Grasping			

FEMININE			
Beautiful	Dependent		Frightened
Sweet	Good		
Unmarried	Pretty		

9.6. Activities

The religious education textbooks present women in strictly limited activities and more frequently as housewives or mothers. A woman is reported preparing the food (3,24), getting water (3,36), dressing the child (3, 24), taking it to school (3, 7) and generally taking care of children's social life and education (3,51; 77; 80).

Table 18. Appearance of Males and Females in Activities in Religious Education Textbooks

YEARS	3	4	5	6	TOTAL
Domestic tasks for women	2	1	-	-	3
Domestic tasks for men	1	-	-	-	1
Child care activities for women	8	3	-	-	11
Child care activities for men	8	-	-	-	8
Leisure activities for women Active: Passive:	3 10	- 1	- -	- -	3 11
Leisure activities for men Active: Passive:	6 6	1 -	- -	- -	7 6
Political and social activities for women	8	-	-	-	8
Political and social activities for men	14	-	17	-	31

In the following examples the importance of the woman as a mother is obvious.

"Mary gave birth to Jesus Christ and took care of him. She saw all his miracles and listened to his teaching. She felt pain on seeing him crucified. She saw him rising from his grave and felt happiness. In this way her mission on earth was over..." (4,11)
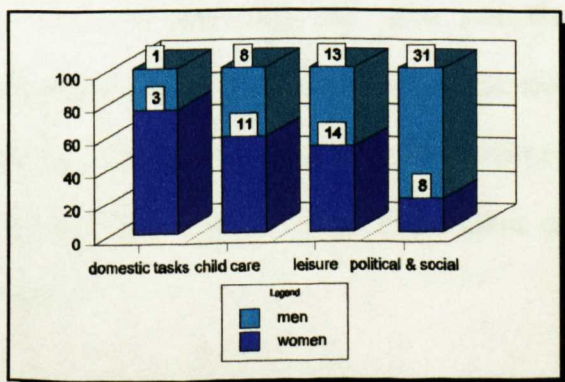
Figure 13. Appearance of Males and Females in Activities.

Mary fulfilled her mission, in the only way the society would accept her, as a mother. She would give birth to the child and give him up to save other people's lives. The most important woman in the Gospels is presented in a traditional interpretation of her role.

There are only 8 references to male children's activities and 7 of them are associated with moral, social and religious education of children, particularly and especially boys (3,39; 62).

There is a priority set for little girls' future roles, the most common of which are as a mother and a housewife.

"When Margarita's aunt brings her baby home, Margarita feels useful taking care of the baby, reading stories and tidying up the baby's laces. She also feels responsible for cleaning up her room and thinking how pleased her parents will be."   (3,3)

In contrast, men appear to have a contribution to every social and political activity. Man is the one who is calling his friends for dinner (3, 16), is selected as deacon (5, 161), president (5, 78), who is a lecturer (5, 161) and a religious reformer (5, 153).

Women appear isolated not only professionally but also socially. Textbooks depicting women as only housewives and mothers, do not improve the subordinate role of women. In this way children are informed that women exist only by virtue of their role as mothers and housewives, dependent on husbands or subordinate to children's needs.

9.7. Behavioural Traits

9.7.1. Social Behavioural Traits

It is very unusual to be presented with *"feminine traits"* in males because it is considered that feminine traits are negative, offensive and not desirable for males (Broverman, 1974, 59-78).

But Tables 19, 20, 21, 22 show what are normally regarded as feminine traits to be present in males in an increasing percentage. This is not surprising since religious education has to do with the life of Jesus, saints, prophets, martyrs, apostles, persons with Christian virtues such as love, kindness, humility and generally with characters shown as prototypes for every good Christian. In this way men appear religious (Table 19, 29).

"Paul used to pray with kindness"   (5,30)

"Demetrius after praying with kindness to our Lord"   (5, 88)

They are soft-hearted (Table 19).

"Jesus felt sorry fort them and He told them'   (3, 42)

Male characters are caring (Table 19).

"Jesus smiled and took the children into his arms, he lifted them up and talked to them with kindness".   (4,72)

As we see in Table 20 behavioural traits referring mostly to females are: religious (23), soft-hearted (13) and respectful of their providers (11).

The last is a specifically female characteristic, meaning that women are dependent on men who are responsible for taking care and protecting them either as a father or as a husband:

"When her parents died, the priest trusted her to Joseph, an honourable and religious man to take care of Maria."   (3, 68)

 or as a brother:

"His parents died when he was 21 years old and he became responsible for the protection of his sister."   (5, 113)

Women are also presented as humble.

"She was already a humble person with many virtues."
"The woman being modest preferred to be unknown."   (6,29)

Women are also unable and incapable. (Table 20)

"As they were approaching the grave they started to wonder who was going to help them move the heavy stone in front of the grave."   (4,111)

A few more characteristics considered as *"masculine traits"* are attributed to males in a percentage of 95.4% while only 4.6% *"masculine traits"* are attributed to women (Table 19, p.193). Since most people think that strength, endurance, heroism and confrontation with danger are male prerogatives, it will not be a surprise that men are in great demand in these

terms. So, men exclusively appear as cruel (Table 19), a characteristic which is not allowed in the sensible and kind woman's nature.

"Herodes(Herod) killed the babies."   (5, 63)

Men are brave (Table 19)

"Diokletianos tried to make him change his mind, but the brave young man said with a lot of courage; I am a Christian and I want to die for Jesus."   (5, 91)

and courageous (Table 19)

"He was a courageous herald for Jesus."   (5, 66)

They are tough and cruel.

"He was a tough man without any feeling.'   (6, 21)

Men also appear as selfish and grasping.

"Their charity aimed at satisfying their egoism."   (6, 181)
"The priest loved himself more than anything else."   (6, 33)

Table 19. Behavioural Traits in Religious Education Textbooks

Social

Masculine Behavioural traits	3		4		5		6		TOTAL	
	w	m	w	m	w	m	w	m	w	m
Cruel /Tough %	-	17	-	18	1	42	-	13	1	90
Brave/Hero/strong /Courageous %	1	8	-	-	5	34	1	3	11	45
Fond of money %	-	-	-	-	-	-		4	-	14
Stingy/avaricious/ selfish %	-	-	-	2	-	-	-	12	-	14
Quarrelsome %	-	2	-	-	-	-	-	1	-	3
Incredulous %	-	1	-	1	-	-	-	-	-	2
Arrogant %	-	-	-	1	-	-	-	1	-	2
Ambitious %	-	-	-	-	-	-	-	2	-	2
Undisciplined %	-	1	-	-	-	-	-	-	-	1
Ungrateful %	-	-	-	-	-	-	-	1	-	1
Provident %	-	-	-	1	-	-	-	-	-	1
Impatient %	-	1	-	-	-	-	-	-	-	1
Unconcerned about appearance %	-	-	-	1	-	-	-	-	-	1
TOTAL %	1 3.2	30 96.8	-	24 100	6 7.3	76 92.7	1 2.6	37 97.4	12 4.6	177 95.4

Table 20. Behavioural Traits in Religious Education Textbooks

Social

Feminine Behavioural traits	3		4		5		6		TOTAL	
	w	m	w	m	w	m	w	m	w	m
Religious %	10	11	6	3	2	10	5	5	23	29
Soft hearted/sensitive %	13	3	-	6	-	3	-	1	13	13
Nurturing %	2	1	1	2	-	8	1	5	4	16
Respectful %	-	-	4	-	2	-	5	1	11	1
Humble/Modest/decent %	1	-	-	1	-	-	4	1	5	2
Wasteful %	-	2	-	1	-	-	-	1	-	4
Incapable %	2	-	1	-	-	-	-	-	3	-
Emotional %	-	-	1	-	-	1	-	-	1	1
Anxious %	-	-	1	-	-	-	-	-	1	-
Vindictive %	-	-	1	-	-	-	1	-	2	-
Hypocrite %	-	-	-	-	-	-	-	3	-	3
Slanderer %	-	-	-	-	-	2	-	-	-	2
Concerned about appearance %	1	-	-	-	1	-	-	-	2	-
Nagging %	-	1	-	-	-	-	-	-	-	1
Complaining %	1	-	-	-	-	-	-	-	1	-
Obedient %	-	-	-	-	-	1	-	-	-	1
Patient %	-	-	-	-	-	-	1	-	1	-
Grateful %	-	-	-	-	-	-	1	-	1	-
TOTAL %	30 62.5	18 37.5	15 51.7	13 48.3	5 16.6	25 83.4	18 52.8	17 47.8	68 48.2	73 51.8
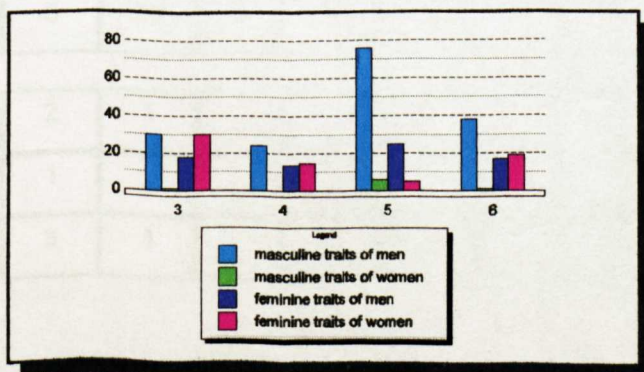
Figure 14. Behavioural Traits by Sex and Years.

9.7.2. Intellectual Behavioural Traits

Male characters seem to have the knowledge, be the observers, the ones who ask and learn. Knowledge of course is not a mental capacity on its own but the process of obtaining knowledge presupposes that there is a mental ability to do so. In this way men are presented (Table 21) as more knowledgeable (21) while women are less so (5).

"Father, Helias said, do you know what our teacher told us? That Jesus' twelve were fishermen.'

(3, 53)

"It is unbelievable what could happen in one day, said Nectarios. I listened to the news last night...'

(3, 65)

Table 21. Behavioural Traits in Religious Education Textbooks
Intellectual

Behavioural traits MASCULINE	3		4		5		6		TOTAL	
	w	m	w	m	w	m	w	m	w	m
Knowledgeable %	4	12	1	8	-	1	-	-	5	21
Questioning %	1	6	-	-	-	-	-	-	1	6
Educated %	-	-	-	6	-	-	-	-	-	6
Intelligent %	-	-	-	2	-	-	-	-	-	2
Observing %	-	2	-	-	-	-	-	-	-	2
TOTAL %	5	20	1	16	-	1	-	-	6	37
FEMININE										
Silly/Illogical %	2	1	-	-	2	-	-	-	4	1
Ignorant %	1	-	-	1	-	-	-	-	1	1
TOTAL %	3	1	-	1	2	-	-	-	5	2

But women's knowledge is not rational, women being overzealous for religion and having a metaphysical explanation for the world about them. In contrast, men are rational and objective in trying to explain everything scientifically.
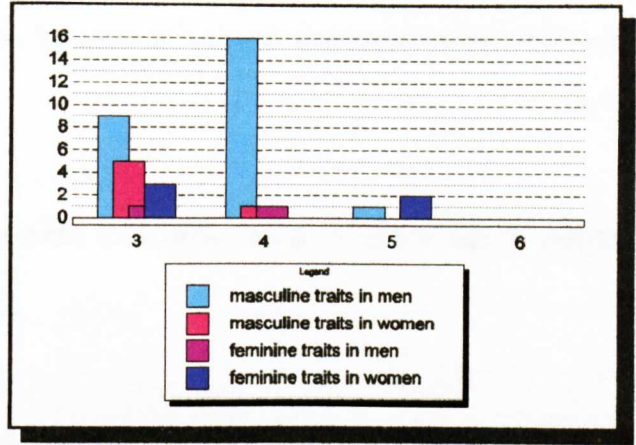
Figure 15. Intellectual Behavioural Traits by Sex in years 3 to 6.

Men are presented as willing to learn about their natural and social environment. By asking they satisfy their curiosity and get information and knowledge from their surroundings.

"Apostolos asked his father how could he be a brother to the rest of the children all over the world." (3, 52)

"Photis was asking about the holy water." (3, 9)

Boys are encouraged to develop their capacity for objective observation of the surroundings. They observe carefully what is happening, while girls have different interests and they do not have the ability to be aware of these things.

"Andreas was sitting in front, next to his father, watching carefully what was happening. Everything had its own meaning. Baptism is a holy mystery." (3, 13)

"As the priest was praying, Marina did not understand too much, besides she had to watch the pastry cakes." (5, 37)

There is a special stress on male education, because boys are to take over the leadership roles in society.

"Paul had acquired a high standard Jewish education." (5, 25)

"Since Vasilios came from a rich family, his parents took care that he should have a high education. After his studies in Caesaria, he went to study in Konstantinoupolis and then to Athens."   (5, 113)

In contrast there is a special concern that girls, as they grow up to become modest, humble, virtuous and kind.

"Mary full of modesty, accepted the holy decision. So she crossed her hands in front of her chest, bent her head to the ground and said: I am God's slave and let it be His will."   (4, 11)

9.7.3. Emotional Behavioural Traits

As regards emotional traits women are presented expressing their sadness mostly by crying (Table 22, 77.4%) which is a characteristic innate to female nature while men do not express their sadness in that way. Only little girls cry. Tears and fear are reserved for the female sex.

"Suddenly the unfortunate mothers started crying."   (4, 104)

"Many women were crying and beating their chests with their fists."   (4, 104)

Women are also referred to as crying out of happiness.

"You could see tears of happiness on her face."   (4, 57)

Another characteristic attributed mostly to women is fear (Table 24, 63.2%).

"Maria full of fear stood in front of Archangel Gabriel."   (3, 68)

"Do not fear, he told her but she was trembling."   (3, 72)

"And the women came out and left from the grave full of panic and fear without saying anything."   (6, 133)

It is remarkable that love is a feminine trait but it is also associated with men (Table 22, 71.4%) mostly with Jesus.

"Jesus loved people."   (3, 64)

"This kind of love was in the heart of the Samaritan."   (6, 61)

There is a great difference in attitudes of anger and hate. Men seem to be free in expressing their feelings, while women's nature is, in contrast, full of patience.

"Then the priest full of anger started screaming and ripping his clothes."   (3, 58)

"Dioscuros was shocked to find out that his daughter was a Christian.. being out of control he took out his sword to kill her."   (5, 93)

"Obviously the priests had given him over to these men because they hated him."   (3, 59)

Table 22. Behavioural Traits in Religious Education Textbooks
Emotional

Behavioural traits MASCULINE	3		4		5		6		TOTAL	
	w	m	w	m	w	m	w	m	w	m
Anger %	-	3	-	2	-	3	-	6	-	14
Envy %	-	3	-	2	1	3	-	1	1	9
TOTAL %	-	6	-	4	1	6	-	7	1	23
FEMININE										
Love %	-	2	1	4	-	-	3	4	4	10
Joy %	4	1	-	3	-	-	-	-	4	4
Tears %	2	1	1	1	7	1	1	1	11	4
Fear %	7	1	-	2	2	4	3	-	12	7
TOTAL %	13 72.3	5 27.7	2 16.6	10 83.4	9 64.3	5 35.7	7 58.4	5 41.6	31 55.3	25 44.7

9.8. Conclusions

It is not surprising that in religious education textbooks men are predominant. Because the Christian religion is androcentric, in the religious

education textbooks, which include topics from the New Testament, the ratio of females to males is naturally unequal.

The preceding analysis has led to two basic conclusions concerning the representation of females compared to males. First, the female sex is underrepresented and second it is differentiated by characteristics based on traditional sex role stereotypes.

God is referred to as Father, Jesus Christ is represented by the male although images of mother and lover are not absent in the tradition. The twelve disciples, the apostles, prophets, priests are all male.

"The majority of the characters in the parables are men. Out of Mark's 32 parables and sayings, 13 involve some specified human actor or actors. There are 18 main characters and they are all men. In Matthew's larger collection of 104 parables and sayings, 47 feature male characters, 85 in all. Out of these 85 characters, 73 are men, 12 women. But even the 12 women are not such a hopeful sign as might be hastily concluded, since 10 of these are in one parable, the parable of the Ten Bridesmaids, and this means that women get a mention in only 3 out of Matthew's 104 parables.

Luke has 94 parables and sayings and a high proportion of these feature human actors: 51 out of the 94. The sum of the main characters is 108 (excluding the 30 thousand soldiers in the parable of the king going to war); 99 are men, 9 women."

(Slee, 1985, 239)

What is important is whether this maleness is theologically significant or simply part of the ancient way of thinking and writing. The New Testament books were probably all written in the first half of the first century and they are part of the social environment that coloured the writer's attitudes towards social issues.

On the other hand, Jesus' behaviour towards women seems to have been unusually positive for a Jew of his period. The Gospels present him as accepting women as individuals and affirming their right to be disciples: he receives their personal service, speaks to them about spiritual matters and recognises them as participants in his mission. Women were the first to discover the empty tomb, the first to witness Christ's resurrection, the first to tell the news to men, the ones to open their homes providing meeting places for the first gatherings of the people, and among those listed as apostles and recognised as prophets. These portray a different picture of women and of women-men relations in the first communities of the church. Studies of the development of later church institutions evidence that women were pushed aside, as the church became the accepted religion of the Roman empire. Women are excluded from formal religion and from participating in important public rituals. The Christian church has been depicted as an instrument in the oppression of women and it is said that the church has always linked feminism with antisexuality. Paradoxically women are said to attend church in much greater numbers than men and this is in accordance with the communal view that women are intuitive, receptive to religious experience and by nature more devoted than men.

We cannot change the Christian religion but it is vital to highlight the values of equality and liberation which are values the Christian religion proposes through Jesus Christ. Gender models are important because of the nature of the written word in a literate society. Written stories possess a powerful message. Considering the influence of textbooks upon children's socialisation process, it is necessary to eliminate gender role bias in the existing textbooks. The idea of sex equality should be contained in the guiding

standards and principles of the curriculum. Particularly in religious education textbooks, which have a significant impact on value and consciousness, the concept of sex equality should be upheld.

We can reinforce the image of women, giving examples of women from the Old and New Testament and of those who held a significant position in Christian tradition. The social values of obedience, passivity, submission, dependence, all characteristics of a weak personality, attributed to women, should be replaced with new values that reveal strength of character.

The ratio of female to male characters should be more equitable in all publications, in the titles, in the body of the text and in any quotation and illustrations. When choosing personal pronouns and collective names, a constant effort should be made to avoid giving precedence to one sex over the other.

The teacher should be aware of the consequences of school education based on the gender role bias and gender role stereotypes because of the influence of interaction between a teacher and students. Classroom teachers should make a conscious effort to ensure that children are given information that suggests the importance of equality between the two sexes.

It would be useful if the present system of having one officially approved textbook was reformed into a new system in which choice of religious textbooks is possible.

The reading material need not reinforce the existing gender inequalities. It can reflect the changing norm, creating positive female images, new meanings and helping to reshape social reality. Books are good vehicles of learning and therefore they should be used to enlarge the horizons of children rather than limit the imagination with prescribed roles.

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CHAPTER 10

THE IMAGE OF WOMEN IN HISTORY

TEXTBOOKS

10.1. The Image of Women In History

What is the relationship between gender and history? History is a selective view of the past, limited by the reality of the present. History written and presented in the past up to the present time, is the history of a minority. This is because men have defined their own experience as history without taking women equally into consideration. History, written by men, has been presented as universally human. The frameworks, concepts and priorities of this universal history reflect male interests, concerns and experiences.

History has been depicted as the history of men, while women are invisible, absent or have merely supportive roles. We have been moulded by the past, without knowing anything about it, because the history we have been taught is the history of a male dominated class. History was and will continue to be male dominated, as our society is. It is the history of men, wars, diplomacy, politics, administration and commerce.

"Women, like men, have been actors in history, and yet their achievements and struggles have generally been neglected by mainstream historians who concentrate upon male subjects, male activities and male experiences".   (Purvis, 1992, 273)

The history of women is ignored. This method of eliminating the social and political destiny of half of humanity represents the most effective form of supremacy. The female population has been studied only in relation to the needs of the male ruling class. Women's activities have been excluded as an area of study by the male oriented definition of history. That exclusion and the invisibility of women's activities help to build up a historical stereotype of the submissive and supportive woman. The absence of women in history, is parallel to the racism implicit in western history (Bhavani & Coulson, 1986,91).

Why has the history of such a large proportion of the population been neglected for so long?

"Of course it would not be quite right to say that men were the sole creators of civilization. While they were occupied with affairs of state and going off to war, someone had to give birth to and raise the children. There are important social roles which have always been fulfilled by women - reproduction, education, responsibility for maintaining the household, care for the elderly, without all of which no society could exist - which testifies to the fact that a woman makes an essential contribution to culture.   (Yulina, 1993, 60)

The history we have been taught has probably been developed by historians with faith in their own objectivity. However, historians have been formed by their own background and by the society to which they belong.

"Historians are the products of their own culture and society: most of them being unaware of their culturally determined prejudices and values. They reflect the value system of our society. Our history has been and often still is the history of the monarchy, the aristocracy and the ruling elite."

(Beddoe, 1983, 9)

Since the majority of historians were male, living in a patriarchal society, they reflected the perspective that male activity was most important and feminine activities and thoughts are unimportant. They fitted women into the categories and value systems where men were the measure of significance, possibly while doing so, being unaware of their sexist bias. This view might be traced back to Aristotle as well as many other Greek philosophers, who exerted enormous influence on social and political thought and teaching. As a result of this influence, men and women were segregated and seemed to perform distinct activities in their respective domains. Historians today who adopt the public-private dichotomy are compounding the error.

The history of women seems unimportant because of its identification with the domestic sphere and child-care. However, women's history is not exclusively domestic. Historians' neglect of women has been a product of their ideas about historic significance. They have defined significance primarily by power, influence and visible activity in the world of political and economical affairs. Traditionally wars and politics have always been a part of history, while those institutions that have affected individuals such as social relationships, marriage and family, remained outside the scope of historical enquiry.

Historians have paid little attention to the circumstances of women's lives because they regarded women as unchanging, a static factor in social development that could be isolated from the dynamics of social development.

"The images we pick up from reading history influence our sense of identity and the sense of our own destiny. We discover the extent to which we are instrumental in shaping society and are able to control these forces outside our immediate sphere of influence".

(Zimet, 1976, 83)

The suppression of women in history isolates every woman. There is nothing by which a woman can orient herself to bring her personal experience into continuity with the past. The effect of this is a constant lack of female role models. Very recently, only within the last twenty years, female historians, mainly have started looking at the past from a different angle. In the 1980s this area of research expanded and was given emphasis in a special branch of history entitled *"Women's History"*.

"We need to know our past to understand our present. The present is a product of the past.... To explain the subordinate position of women in society, the narrowly defined female role, the attitudes of men towards women, the low esteem in which women hold themselves, we need to look backwards to the origins and development of these ills.... A knowledge of the past can also prove a source of strength, encouragement and admonition to women engaged in current initiatives for change."   (Beddoe, 1983, 6)

Both men and women make history and history has much to gain by expanding its view and including women.

10.2. History Textbooks

10.2.1. Review of Literature

The content of history lessons is human life: the way of thinking and acting and social and cultural life. The history curriculum refers to events of the past and if we are not careful, there is little correlation with the present world where the child is living.

In Greece there is apparently no research about the treatment of gender in history textbooks. In the U.S.A., the research of Janice Trecker on

the treatment of women in American high-school history books, has shown that women have been systematically ignored.

"When women are included, their profiles and capsule biographies are often introduced in separate sections, apart from the body of the text. While this may simply be a consequence of attempts to update the text without resetting the book, it tends to reinforce the idea that women of note are, after all, optional and supplementary."

(Trecker, 1977, 146)

In 31 German History and Social Science books used in academic, technical and vocational secondary schools in 1973, there is only one sentence on the introduction of woman's suffrage, among the list of other reforms such as the eight-hour day and unemployment insurance. Only one book mentions that there were female representatives in the National Assembly. None of them mentions that there were several factions in the German women's movement fighting for different concepts of the future society (Janssen-Jurreit, 1982, 17).

Schmidt and Schmidt (1975) studied twenty-seven leading textbooks used at college level in the American History Survey Course. The study tabulated all references to women, comparing the total number of pages of each text, to the number of pages devoted to women and the total number of illustrations in each text to the number depicting women.

"The hefty tomes of the survey texts, which range from about four hundred to over two thousand pages, devote from a high of 2 percent to an infinitesimal . 05 per cent of the textual material to American women. Predictably, in illustrated texts, women are seen far more frequently than they are written about, claiming as much as 6 percent of the total number of illustrations."

(Schmidt & Schmidt, 1975, 43)

Another piece of research on American history textbooks published after 1970, shows a small improvement. The latest books enter the names of a few women under "Witch Trials", "Women's Rights" and "Reform movements". The latest text also contains a few paragraphs on some middle-class professional women, while for the most part it ignores the aspirations of the millions of working-class women.

"Some of the newest history texts attempt to respond to feminism criticism but even these fail to delineate the similarities and the differences between the male and the female experience. The reality was that women shared similar work experiences with men on farms, plantations and in factories in addition to carrying the extra burden of traditional women's work. This reality is generally ignored in textbooks. While childbearing, childrearing and "women's work" in the home, have never been a male experience, textbooks neglect to analyze the essential importance of these activities to community building..."

(Council on Interracial Books, 1985, 103)

Wesley (1977) analysed the content of high school history textbooks from 1959 to 1976. He found that women had less coverage, were overpresented in stereotypical roles and were less frequently authors, co-authors or consultants for history textbooks. They were also less often dominant characters in pictures illustrating history textbooks (Wesley, 1977).

The content of ten popular British history textbooks for primary schools has been analysed by Cairns and Inglis (1989). A qualitative as well as a quantitative analysis by the authors found a very traditional approach, with the exception of one author.

"The tendency to ignore and distort, even to denigrate, the role of women is apparent in the approach of all but one of the textbooks... In the Middle Ages while the Lord of the Manor has an imaginary role his wife is silent and he speaks for her."

(Caims & Inglis , 1989, 225)

The graphics of textbooks offer important indications of sexist bias. A famous American history text, "The National Experience", includes only one picture of a black woman and two pictures of white women, both in group portraits: Eleanor Roosevelt, and Jaqueline Kennedy at the funeral of her first husband (Gordon L. et al., 1975, 55).

Sutherland criticised the content of History textbooks:

"History has been taught very much as political and military history until comparatively recently. As men have for centuries occupied the main positions of formal authority in most societies, inevitably men have been most emphasized in history teaching. Certainly some women do appear as rulers of states, but they tend to have a bad press - Mary Stuart, Catherine of Medici, even Queen Anne - though Elizabeth I - tends to do something for the female image."

(Sutherland, 1981, 133)

10.2.2. Greek History Textbooks

History is taught twice a week in the last four years of the primary school. In the primary school, History is taught by the class teacher and in the secondary school by a teacher who has completed special studies in the Faculty of History and Philosophy.

History in the curriculum aims to help students form a historic consciousness that is a basic element in their education, as individuals and as members of society. The content of the primary curriculum includes the subjects below:

♦ Prehistoric people, people of Minoan Crete and Mycenae (place, natural environment, conditions of life, culture, Greek mythology).

♦ The life of Greeks through the ages

♦ Life in Greece at the time of the Roman Empire

♦ The Byzantine Empire

♦ The period after the fall of Constantinopole, the revolution in 1821, the Greek State up to recent time.

There are four History textbooks, one for each level.

10.2.3. Findings and Discussion

As we have seen in Chapter 8, the textbooks were analysed according to preset formulae. The results of the analysis appear below.

10.3.1. Appearance and Frequency of Male and Female Characters

The total figures in Table 23,   indicate that the female presence is very low. The total number of women appearing in texts is 630 (6.4%), while the total number of men is 9267 (93.7%). In titles only 28 women appear (10.1%), while there are 251 men (89.9%). These proportions correlate logically with the absence of women in *"history"*, but they have no relation to the social reality.

A second finding from Table 23 is that the ratio between girls and boys appearing in Greek primary school textbooks is different to that between women and men. There are 53 girls (32.6%) and 110 boys (67.4%). This indicates that the sexist stereotypes are more strictly applied to the adult role models.

Table 23. The Appearance and Frequency of Males and Females in History Textbooks.

GRADES	3	4	5	6	TOTAL
Women in text	273	152	122	83	630
%	15.72	5.03	5.03	3.5	6.36
Men in text	1,464	2,864	2,305	2,634	9,267
%	84.28	94.96	94.97	96.95	93.64
Women in titles	14	9	3	2	28
%	18.43	11.69	4.23	3.64	10.04
Men in titles	62	68	68	53	251
%	81.57	88.31	95.77	96.36	89.96
Girls in text	22	21	4	6	53
%	44.00	35.59	16.66	20.00	32.52
Boys in text	28	38	20	24	110
%	56.00	64.41	83.34	80.00	67.48
Girls in titles	–	–	–	–	–
%					
Boys in titles	–	–	–	–	–
%					
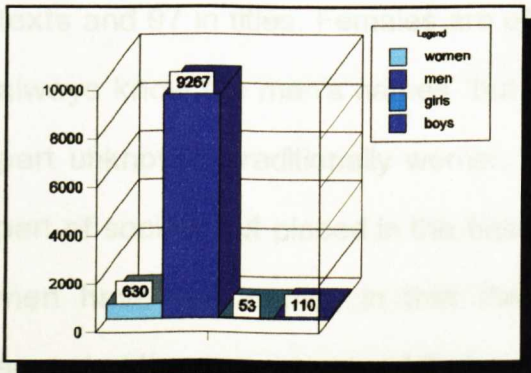
Figure 16. Appearance of Males and Females in Text.
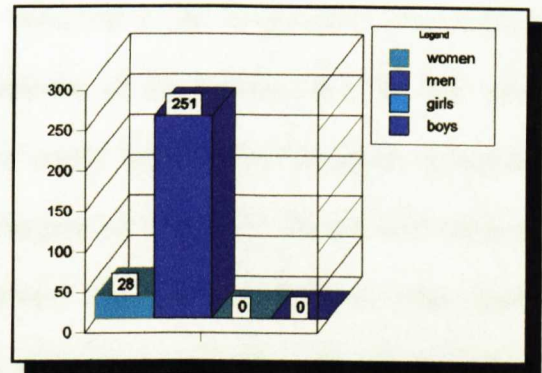
Figure 17. Appearance of Males and Females in Titles.

A third finding from Table 23 is that the higher the level, the more obvious the absence of females becomes. There are 309 females in the 3rd year textbook, 182 in the 4th, 129 in the 5th and 91 in the 6th. In total, 711 females (6.3%) appear in the texts compared to 10,618 males (93.7%).

Given the numerical inequality of women in these textbooks, girl readers are thereby being deprived of adult role models with whom they can identify, while boys are being provided with plenty of adult role models. Considering that the human race consists of as many females as of males in

our society, the low female representation in the texts does not reflect reality appropriately.

10.3.2. Appearance and Frequency of Named Characters

According to Table 24 (Named Characters), females are less often   named than males in history textbooks. As the table indicates there are 211 named females in texts and 14 in titles while there are 1,900 named males in
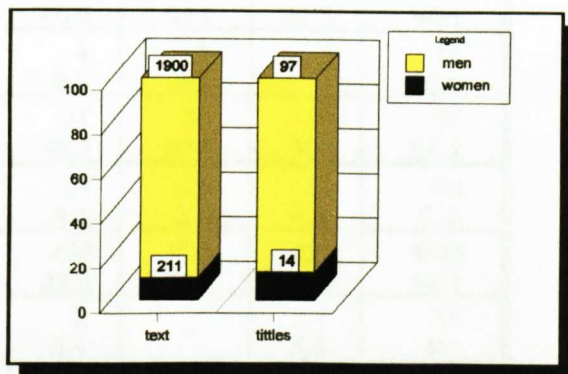
Figure 18. Named Characters in Text and Titles.

texts and 97 in titles. Females are often referred to as *"a woman"*. We almost always know the men's names but the names of the women are for the most part unknown. Traditionally women have rarely been considered an essential part of society but placed in the basic category of *"women"*. In our society only men have real names in that their names are permanent and they have accepted the permanency of their names as one of the rights of being male.

The important consideration given to names is quite remarkable and there is a reference to it in the textbook for the 3rd year (3, 112) about Minoan Crete. This report is about a *"strange"* custom: the children get their name from their mother's family and not from their father's which obviously stands in contrast to the patriarchal structure of our society.

The reference in the textbook for the 4th year (4, 257) is more familiar to our society: the 10th day after the delivery the father gives a name to the child and if it is a boy, he gets the name of his grandfather from his father's family.

Table 24. The Appearance and Frequency of Males and Females in History Textbooks (Named Characters, Famous Persons, Principal Roles)

YEARS	3	4	5	6	TOTAL
Named characters in text **W**	103	62	26	20	211
%	25.2	9.1	5.4	3.7	9.9
Named characters in text **M**	305	626	449	520	1900
%	74.8	90.9	94.6	96.3	90.1
Named characters in title **W**	9	4	1		14
%	24.3	9.7	8.3	–	12.6
Named characters in title **M**	28	37	15	17	97
%	75.7	90.3	93.7	100	87.4
Famous women in text	54	32	25	22	133
%	20.5	6.1	5.6	4.8	7.9
Famous men in text	209	492	415	429	1545
%	79.5	93.9	94.4	95.2	92.1
Famous women : title	8	2	–	1	11
%	25.8	5.4		5.8	11
Famous men : title	23	35	15	16	89
%	74.2	94.6	100	94.2	89
Principal roles **W**	8	6	3	6	23
%	10.8	6.1	2.5	4.4	5.4
Principal roles **M**	66	93	116	130	405
%	89.2	93.9	97.5	95.6	94.6

Female characters that appear have been reduced in power and in vividness by being anonymous and less concrete than the images of males. It is easier for the pupils to identify with a named character than with a *"woman"*. Girl pupils have therefore again been deprived of historical adult role models to identify with and to imitate.

10.3.3. Appearance and Frequency of Famous Persons

As shown in Table 24, 1,545 of the famous persons are males (92.1%), while only 133 are females (7.9%). In texts and in titles 164 males (89%) and 11 females (11%) appear.
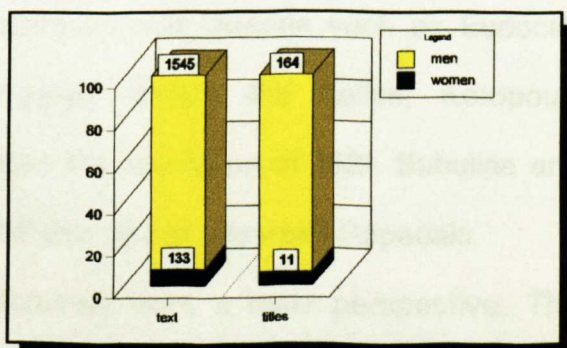
Figure 19. Famous Persons in Text and Titles.

History is a catalogue of male heroes; leaders, politicians,

Kings and Emperors. All of those named *"important women"* have broken the

female stereotype of their own days and have reached the pages of history books because they managed to do their work in a man's field. The history of notable women is the history of exceptional women and does not describe the experience and the history of the mass of women.

In order to find out about women of the past, we have to look beyond the famous women who have been accorded status as *"famous"* for their achievement in men's roles or in areas of men's interest.

The textbooks are filled with male worthies. There are heroes such as Hercules, Achilles, Leonidas, Kolokotronis, Papaflessas; politicians such as Kapodistrias, Benizelos, Trikoupis, Macarios, Karamanlis, G. Papandreou; Kings and Emperors like Konstantinos (Constantine), Iustinianos (Justinian), Julian, Othon (Otto), George the Second; leaders such as Jesus Christ, Mohammed, Alexander the Great; intellectuals such as Socrates, Plato, Aristotle, Kavafis, Seferis, Kazantzakis. Non-Greek important men are referred to as well such as Dareus, Midas, Hannibal, Scipio, Julius Caesar, Hitler, again emphasising women's absence from the theatre of world history.

On the other hand, there are a few women who emerged from the anonymity in which most women were held: Goddesses from Greek mythology like Minerva, Demetra and Hera. Empresses and Queens such as Eudocia, Theodora, Aphrodite, Theophano, Amalia. Artists like Kallas, Kotopouli, Paxinou. There are also two heroes from the revolution of 1821, Bubulina and Mavrogenous and two authors: R. Bubi-Papa and M. Mavroidi-Papadaki.

History is written almost exclusively from a male perspective. The textbooks emphasise the absence of women in history, offering a biased view, distorting events of the past, excluding girl pupils from their own history and boys from female history.

10.3.4. Appearance and Frequency of Principal Roles

In Table 24   (Principal Roles), out of 428 principal roles in history textbooks, 405 are males (94.6%) and only 23 are females (5.4%).   Since   women compose half the population in our society,   their   under-representation indicates the sexist bias of the text. It is
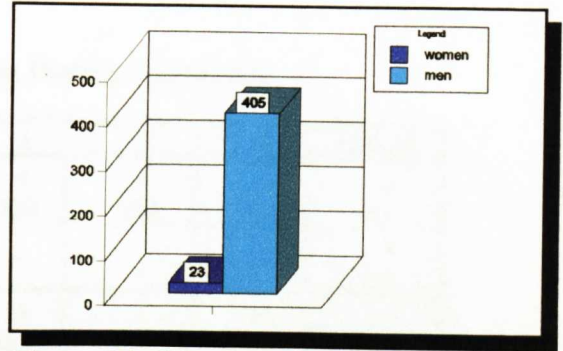
Figure 20. Principal Roles.

not that women have not participated equally in history, but rather the history books, that were written by men, focus mainly on male problems. There are lots of chapters referring exclusively to men, but when a chapter's principal role is dedicated to a woman there are plenty of references to men too.

10.4. Social References

10.4.1. Marital and Family Status

Women have been most often defined by their sexuality as either possessed by or dependent on men. In Table 25 (Marital Status), there are 12 (80%) women with mentioned marital status as wives or widows and 3 (20%) men. Widows belong in a special category and we usually find the word *"widow"* accompanied by the word *"orphan"*. In that way the desperate plight of those women who have lost their protector and supporter is emphasised. It is worth noting that there is no reference at all to a widower.

In history textbooks there is Beautiful Helen as Menelaos's wife (3, 188), Penelope as Ulysses's wife (3, 203). Hera is not only a Goddess of the

family, she is also defined as Dias' wife, but it is not the same for Dias who appears only as a God (4, 27).

Table 25. Social References in History Textbooks

YEARS		3	4	5	6	TOTAL
Marital status	W	3	4	4	1	12
%		50	100	100	100	80
Marital status	M	3	–			3
%		50		–	–	20
Family status	W	41	14	1	11	67
%		82	46.6	50	73.3	69.1
Family status	M	9	16	1	4	30
%		18	53.4	50	26.7	30.9
Occupations in text	W	15	5	15	7	42
%		6.3	1.5	3.4	1.7	3.1
Occupations in text	M	220	340	376	403	1339
%		93.7	98.5	96.2	98.3	96.9
Occupations in title	W	1		1		2
%		9.1	–	10	–	5.2
Occupations in title	M	10	8	9	9	36
%		90.9	100	90	100	94.8

W=women M=men
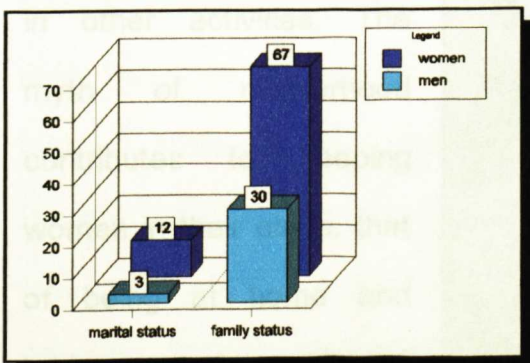
Figure 21. Social References: marital and family status.

There are also the anonymous wives of Darius (4, 197) and Philipus (4, 206), as persons too minor to have their names recorded in history. In the textbook used in the 5th year there is a chapter about Byzantine diplomacy. In that chapter the governors are shown offering honour titles and gifts to the barbaric magistrates in order to become allies. Sometimes they even offered them Byzantine princesses for wives in trying to achieve their aims (5, 211). Being dependent on men, women have been the objects of political games, thus obtaining value in world history only in this way.

Data in Table 25 (Family Status) depicts the traditional and stereotyped sex roles assigned to women. Mothers outnumber fathers by more

than two to one. Mothers play the primary parental role. It is not surprising that there are 67 women (69.1%) mentioned as mothers while there are only 30 men (30.9%) out of a larger group depicted as fathers.

Many of the differences between men and women derive from the biological fact that women are capable of reproduction. Pregnancy, child-bearing and child-raising mean that women cannot be involved in other activities. The myth of motherhood contributes to keeping women in their place, that of being at home and taking care of the children. It is not considered proper for children to be raised by anyone else except their mother.

Illustration from the 3rd year History Textbook, 1990, 4. Even in prehistorical families their structure is the same: man protector and woman-mother.

"The child was rarely brought up separately from his mother"   (4, 257)

The mother's role is idealised and this together with the roles of wife and housewife constitute the three outstanding roles of a woman. Society and

family start to evaluate woman positively from the moment she becomes a mother. It seems that motherhood is a role with more value in society than that of a wife's and housewife's role.

"Spartians respected women and especially mothers" (4, 64)

10.4.2. Occupational Roles

As shown in Table 25 (Occupations in Text and Titles), there are 1339 reports of male occupations (96.9%) and only 42 of female occupations (3.1%). In titles there are 36 reports of male professional roles

Figure 22. Social References: Occupations.

(94.8%) and 2 of females (5.2%). The professional world in history textbooks is a man's world. It is mainly through school textbooks that children get an idea of various occupations of the adult world. The message in the textbooks seems to be that girls must be prepared for a life of housewives and mothers rather than consider a professional career.
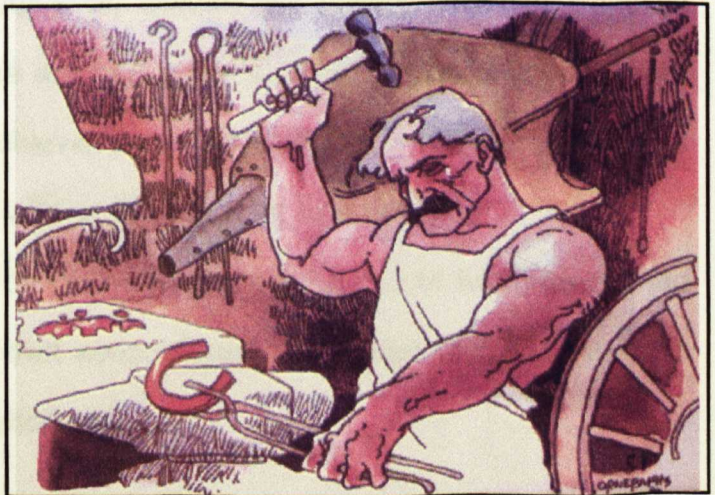
Illustration from 3rd Year History Textbook, 1990, 64.

The variety of male occupations in the texts is considerably greater than that of females. Data from Table 26 show that males are presented 123 occupations compared to 18 for females. This ratio partially reflects the actual situation in the past but discriminates against women today by suggesting that their social contributions are inferior to those of males.

The texts not only suggest an almost limitless variety of occupations for males but they seem to have a monopoly on professions conferring power and prestige. They appear as kings, emperors, magistrate, sultans, diplomats and patriarchs. Men are figures of authority. They appear as generals, officers, commanders, captains and governors. They are skilled workers: construction workers, metal workers, carpenters, fishermen and drivers. They are in positions that require advanced education: architects, archaeologists, doctors, astronomers, palaeontologists and geologists. They belong to the intelligentsia. They are poets, authors and philosophers. It is noteworthy that there are also a number of criminals: thieves, pirates and beggars (Table 26).

On the contrary, the limits for women are strict. Girls get the message that they can become nannies, weavers, innkeepers, farmers and servants (Table 27). High status occupations for women are: queen, empress, princess and magistrate. However, these are occupations where status is usually more a matter of ascription than achievement. The status of these occupations is usually derived from being the wife or the daughter of a king.

It is worth noting that there is also the occupation of witch mentioned and the negative connotations that accompanies it. Women were much more likely targets of suspicion for witchcraft.

"The witch was the stereotypical opposite of the good wife. She was the woman who was trying to act entirely independently of male control, asserting her own powers, sexual and otherwise, to gain financial reward or carry out revenge on her enemies".

(Jackson, 1995, 72)

The Devil could more easily affect women in making a contract with them because they were the lustful daughters of Eve, who had openly brought evil and sin into the world. In contrast, the magician is a man with a special capacity.

Women work for financial reasons and not for their satisfaction.

"At market there were poor women who were selling various things".   (4, 259)

Only men's work is really considered worthy of description. Men appear in their work place and there are often details about their occupation, even whole chapters consecrated to men's professional worlds (3,93; 101; 154; 161). Women are excluded from the newer occupations based on twentieth century technology. The absence of positive and supportive images relevant to working women's lives has, as a result, that both sexes accept traditional images which is harmful for boys and girls alike. This is also a contradiction to present day reality where more women conquer *"male"* occupations and high positions, working not only for financial reasons but also for the satisfaction of their ambitions.

Table 26. List of Occupations in History Textbooks Assigned to Males

	YEARS	3	4	5	6	TOTAL
1	King	52	64	10	25	151
2	Poet	3	29	5	28	65
3	Emperor	-	1	59	2	62
4	Farmer	20	7	29	5	61
5	General/Colonel	-	27	12	16	55
6	Soldier	1	16	20	17	54
7	Magistrate/Prince	10	20	10	12	52
8	Sultan/Pasha/Aga	-	-	3	41	44
9	Teacher	3	9	13	15	40
10	Technician	21	2	8	7	38
11	Priest/High priest	7	5	11	12	35
12	Slave	1	20	8	4	33
13	Merchant	11	11	3	7	32
14	Officer/Corporal	2	-	10	16	28
15	Sailor/Master mariner	8	3	4	11	26
16	Painter	3	5	4	13	25
17	Commander/Chief commander	2	4	7	11	24
18	Author	-	1	9	11	21
19	Politician	-	5	2	13	20
20	Historian	4	5	7	3	19
21	Thief	-	3	3	13	19
22	Prime minister	-	-	2	15	17
23	Patriarch	-	-	10	7	17
24	Musician/Composer/Maestro	2	2	4	8	16
25	Legislator/Jurist/Lawyer	1	9	3	2	15
26	Philosopher	-	7	8	-	15
27	Shepherd	7	1	2	4	14
28	Pirate	1	1	6	5	13
29	Monk	-	-	9	4	13
30	Guard	2	1	7	3	13
31	Architect	-	4	6	2	12
32	Admiral	-	5	1	6	12
33	Artist	4	6	-	1	11
34	Singer	5	3	3	-	11
35	Governor	2	2	-	7	11
36	Clerk/Secretary	1	1	8	1	11
37	Magician	10	-	-	-	10
38	Scientist	5	2	1	2	10
39	Hunter	9	-	-	-	9
40	Worker	4	1	4	-	9
41	Orator	-	8	-	-	8
42	Land owner	-	2	4	2	8
43	Sculptor	1	3	2	2	8
44	Mercenary	-	1	7	-	8
45	Archaeologist	7	-	-	-	7
46	Deputy	-	4	-	3	7
47	Tradesman	1	5	1	-	7
48	Despot/Metropolitan	-	-	4	3	7
49	Stock farmer	2	3	1	-	6
50	Pope	-	-	6	-	6
51	Maths master	-	3	3	-	6
52	Educator	-	5	1	-	6

53	Archbishop/Bishop	-	-	1	8	9
54	Minister	-	-	-	6	6
55	Carpenter/Wood cutter	1	1	1	2	5
56	Athlete/Gymnast	2	3	-	-	5
57	Construction worker	-	1	1	3	5
58	Doctor	1	1	1	1	4
59	Servant	-	1	3	-	4
60	Diplomat	-	-	2	2	4
61	Colonel	-	-	-	4	4
62	Prophet	2	2	-	-	4
63	Driver/Coach-man	3	-	-	1	4
64	Ambassador/Consul	-	-	1	3	4
65	Beggar	3	-	-	-	3
66	Astronomer	1	2	-	-	3
67	Herald	1	1	1	-	3
68	Cook	-	2	1	-	3
69	Engineer	-	1	1	1	3
70	Missionary	-	-	3	-	3
71	Professor	-	-	3	-	3
72	Sponge fisher	-	-	3	-	3
73	Paleontologist	2	-	-	-	2
74	Engraver/Metal worker	2	-	-	-	2
75	Geographer	1	1	-	-	2
76	Messenger	-	2	-	-	2
77	Businessman	-	1	-	1	2
78	Police officer	-	2	-	-	2
79	Camel-driver	-	-	2	-	2
80	Jeweller	-	-	2	-	2
81	Miime/Clown	-	-	2	-	2
82	Chanter	-	-	2	-	2
83	Hagiographer	-	-	2	-	2
84	Fisherman	-	-	2	-	2
85	Tax-collector	-	-	-	2	2
86	Czar	-	-	-	2	2
87	Chancellor	-	-	-	2	2
88	Lord	-	-	-	2	2
89	Regent	-	-	-	2	2
90	Folklorist	-	-	-	2	2
91	Dictator	-	-	-	2	2
92	Actor	-	-	-	2	2
93	Caliph/Emir	-	-	1	1	2
94	Waiter	1	-	-	-	1
95	Explorer	1	-	-	-	1
96	Geologist	1	-	-	-	1
97	Manufacturer	1	-	-	-	1
98	Printer	1	-	-	-	1
99	Advisor	-	1	-	-	1
100	Door keeper	-	1	-	-	1
101	Shop keeper	-	1	-	-	1
102	Porter	-	1	-	-	1
103	Overseer	-	1	-	-	1
104	City planner	-	1	-	-	1
105	Centurion	-	1	-	-	1
106	Dancer	-	1	-	-	1
107	Senator	-	1	-	-	1
108	Cobbler	-	1	-	-	1
109	Slave-trader	-	1	-	-	1
110	Body guard	-	1	-	-	1

111	Barber	-	-	1	-	1
112	Valet	-	-	1	-	1
113	Economist	-	-	1	-	1
114	Theologian	-	-	1	-	1
115	Deacon	-	-	1	-	1
116	Notary	-	-	1	-	1
117	Acrobat	-	-	1	-	1
118	Agriculturist	-	-	-	1	1
119	Usher	-	-	-	1	1
120	Medical examiner	-	-	-	1	1
121	Abbot	-	-	-	1	1
122	Astrologer	-	-	-	1	1
123	Linguist	-	-	-	1	1

Table 27. List of Occupations in History Textbooks Assigned to Females

	YEARS	3	4	5	6	TOTAL
1	Queen	6	-	-	3	9
2	Priestess	2	3	-	-	5
3	Empress	-	-	5	-	5
4	Princess	-	-	4	-	4
5	Magistrate	2	-	1	1	4
6	Servant	2	1	-	-	3
7	Nanny	1	1	-	-	2
8	Farmer	1	-	-	-	1
9	Witch	1	-	-	-	1
10	Baker	-	-	1	-	1
11	Poet	-	-	1	-	1
12	Historian	-	-	1	-	1
13	Weaver	-	-	1	-	1
14	Greengrocer	-	-	1	-	1
15	Innkeeper	-	-	1	-	1
16	Soprano	-	-	-	1	1
17	Actress	-	-	-	1	1
18	Sultana	-	-	-	1	1

12.4.3. Type of Environment

Data from Table 28 shows that males appear mainly outdoors. There are 225 cases(95.6%) of men appearing outdoors compared to only 18 females (7.4%). Being outdoors, men perform all the interesting activities that are not permissible for women. Women are depicted mainly indoors (92.8%) while there is only one man who appears at home. Even the Queen appears mainly in her home (palace).

"Sometimes the King   appeared working in his farm. The Queen usually stayed in the palace knitting, weaving and supervising the servants."   (4, 21)

It is worth noting that only boys   appear at school, a place that belongs to both sexes nowadays. In the past, official school education was considered as belonging exclusively to men, a male privilege, which women did not have.

Things were different for girls in ancient Greece. They didn't go to school."   (4, 259)

"Boys were going to school and were learning to read, to write and to count. Girls were being taught the same things at home."   (5, 24)

Table 28. Social References in History Textbooks. Type of Environment

YEARS	3	4	5	6	TOTAL
Women outdoors %	9 20.5	4 6.2	–	5 6.1	18 7.4
Men outdoors %	35 79.5	61 93.8	51 100	78 93.9	225 95.6
Women at home %	1 100	9 90	1 100	2 100	13 92.8
Men at home %	–	1 10	–	–	1 7.2
Girls at school %	–	–	–	–	–
Boys at school %	–	–	4 100	5 100	9 100
Women at work %	1 3.7	1 4.6	–	1 3.3	3 2.5
Men at work %	26 96.3	21 95.4	40 100	30 96.7	117 97.5

Not surprisingly, men appearing at work number 117 (97.5%) compared to 3 women (2.5%). Work appears as an exclusively male domain in which females seem to have little place. This
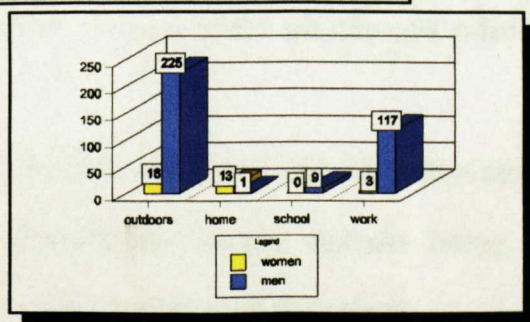
Figure 23. Social References: Type of Environment.

under-representation of women is disappointing and it carries an overwhelming impression that women and men have separate lives.

Women's proper place has traditionally being seen at home, with men monopolising the public sphere. Women, it is being suggested by the textbooks, do not engage in outdoor or professional activities. Males can only be free for their outdoor enterprises and adventures so long as they have women to wait upon them. This may represent to some extent the truth about the past but should not be presented to pupils of today without some comment.

10.5. Linguistic Content

10.5.1. Number of Pronouns

Language may carry prejudicial attitudes and other negative aspects. Thus sexist language reflects and reinforces a patriarchal male bias in our culture.

We can find sexism in the structure of language. Phrases with the male pronoun *"he"*, refers not only to males but also to females. *"He"*, is not generally interpreted as representative of a neutral antecedent, but of a male antecedent. The masculine gender pronoun is used when people are referred to in general.

Words that have no equivalent for the other sex, can reinforce sexist thinking, i.e. the word "άνθρωπος" (anthropos) means human being. In textbooks the word άνθρωπος (anthropos) is used instead of "*man*".

"The άνθρωπος (anthropos) lived through difficulties, but he managed to get through using his

mind and everything else he had created: tools, arms, fire and society".   (4,49)

Terms and phrases using άνθρωπος (anthropos) and meaning man
are grammatically correct but seem to have a subtle effect on excluding female
representatives from the historical world.

Table 29. Linguistic Content in History Textbooks

YEARS	3	4	5	6	TOTAL
Number of pronouns assigned to females	82	51	9	20	162
%	14.4	6.4	2.6	3.4	7.1
Number of pronouns assigned to males	485	737	340	557	2119
%	85.6	93.6	97.4	96.6	92.9
Number of attributes assigned to females	20	8	3	5	36
%	19.8	3.7	1.8	2.9	5.6
Number of attributes assigned to males	81	207	158	163	609
%	80.2	96.3	98.2	97.1	94.4

There is ambiguity and confusion for the reader over the supposedly
gender neutral pronouns. Sometimes the gender neutral pronouns refer to both
sexes but mainly they refer to males designating mainly male characters. To
start with, textbooks use supposedly neutral terms such as child, pupil,
student, but then go on to use
masculine pronouns, thus making
pupils think that those neutral
nouns are male.

Sexism is also found in words that
are associated with one sex, i.e.
professions such as doctors or
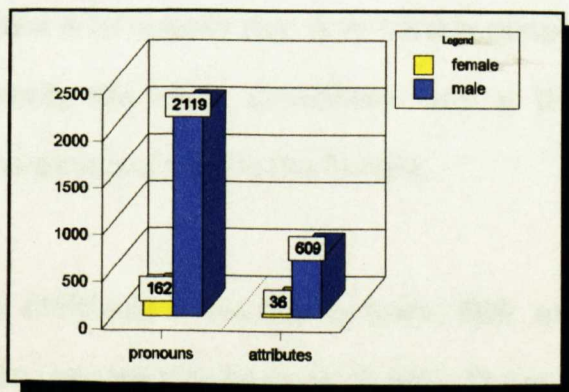
Figure 24. Linguistic Content.

engineers are usually associated with men, especially if textbooks keep reinforcing this in illustrations as well as in texts. In the exercises following one particular chapter there is a question "What are the occupations of the people in the illustrations?", where only men are being depicted (3,63).

The texts often begin with a general form and refer to it afterwards by using a masculine pronoun. A lesson with the title "άνθρωπος (anthropos), the most admirable of all", starts with the neutral word "anthropos" and continues "with his strong mind he learned how to speak, to think and live by the law. He is capable of everything". There is no doubt about the above as the illustrations of this lesson also show only men in various activities (3, 99).

The textbooks tend to use the word *"children"* when they actually mean boys. It might be thought that terms such as *"children" and "pupils"* would refer to both sexes, but the words are exemplified and personalised in different ways.

"Children from the age of 7 years old started going to school. When they became 18 years old they joined the army".   (4,133)

"Children trained in military camps".   (4,136)

The style of the textbook writers is to specify that only certain people are female and the unspecified majority are male. Unmarked form in the language (which is male) is the norm the exception being the female.

10.5.2. Number of Attributes

As shown in Table 29, of 645 attributes in the history texts, 609 are assigned to males (94.4%) and only 36 assigned to females (5.6%). There is a variety of positive as well as negative characteristics in attributes associated

with males. Studying history, pupils must face the model of *"superman"* and *"super hero"*. As we can see in Table 30 man is brave, strong, tough, powerful, impetuous, daring, dangerous, warlike, terrifying, a leader, a winner, a conqueror and a pioneer. Sexist attitudes in our culture are not only harmful for the development and growth of girls but they are also disastrous for boys. When being confronted with such accounts in history books boys may feel incapable of emulating their ancestors and this may make them feel anxious and inferior to them, or perhaps they will want to emulate powerful but dangerous figures.

Girls are taught from the history textbooks to be beautiful, pretty, elegant, bejewelled, tiny, modest and sweet. As we see in the list of attributes (Table 30), the attributes assigned to females are associated with the physical portrayal of women. Nobody is interested in whether a man is fat or ugly, but a woman must be slender and beautiful in that way fulfilling the stereotype of being a sex object.

It is remarkable that in the list of attributes assigned to women, there is no adjective related to intellect, a fact which reinforces the stereotypes concerning women. In contrast, men are intelligent, wise and educated.

The linguistic content affects the image of women presented in these texts. Although choice of pronouns and adjectives may seem a trivial matter, it frequently leads to misunderstanding. Given the cultural orientation of our society, pupils will assume that activities are only carried out by men unless there is a specific mention of women.

Table 30. List of Attributes Assigned to Males and Females in History Textbooks

MASCULINE			
SOCIAL		**INTELLECTUAL**	**EMOTIONAL**
Advantageous	Impetuous	Educated	Happy
Abitious	Kind	Illiterate	Joyful
Benefactor	lazy	Intelligent	
Boastful	leader	Wise	
Brave	Liberator		
Capable	Obstinate		
Conqueror	Patriotic		
Courageous	Powerful		
Creative	Protector		
Criminal	Provident		
Dangerous	Responsible		
Daring	Strong		
Decisive	Superficial		
Drunkard	Terrifying		
Faithful	Tough		
Famous	Uncontrolled		
Fanatic	Veteran		
Fighter	Warlike		
Founder	Wild		
Glorious	Winner		
Gluttonous	Worthy		
Grasping			
FEMININE			
Beautiful	Modest		Magnanimous
Bejewelled	Ordinary		Unhappy
Egoistic	Poor		
Elegant	Pretty		
Fat	Sweet		
Foxy	Tidy		
Holy	Tiny		

10.6. Activities

Men appear more frequently than women in history texts. As a result the range of men's activities is much more extensive than women's. Male activities in our society are considered the most important. Therefore male activities have primacy in history texts.

Females are engaged in the traditional domestic sphere of activities.

"Women stayed at home doing the housework"   (4, 133)

A woman's place is at home, as is defined by the history textbooks. They must prepare the food (4, 189), knead the bread (6, 92), weave (5, 60), do the knitting (6, 58) and sew the family clothing (5, 133). The only male appearance in domestic care activities is in the textbook of year three where a man is constructing his house (3, 54).

Apart from the role of housewife, the woman has the role of mother also being charged with child-care activities while father is absent all day long.

"The child was very rarely separated from its mother. She took care of the child, putting it to bed, singing rhymes and reading fairy-tales".   (4, 257)

In contrast, men are engaged in socio-political activities. Socio-political images are composite pictures built on prestige and power. They are often associated with economic status and educational attainment. Women are part actors in the community.

It is not a coincidence that 77 out of 78 of political and social activities, are attributed to men (Table 31). Men appeared in the majority and in a variety of political and social activities: men are presented having the right to vote (4, 159), electing an emperor (5, 54), being elected for deputies (4, 129), being organised in syndicates (5, 155) and participating in political administration (4, 127). They are also presented in making revolutions (5, 28), protesting against heavy taxes and bad administration (5, 77), rebelling (4, 214) and becoming tyrants (4, 43).

Men can be reckoned as fully active members of the political body of the nation. Women however, are tied to the domestic sphere by not

appearing, contributing to or participating in the body politic. Indeed, they have been discouraged from having a high profile in many areas of public life.

There is a gender inequality depicted with regards to leisure. The traditional domestic division of labour, the care of children and the prevailing norms about appropriate behaviour had direct consequences on women's access to leisure. Few females engaged in leisure activities compared with males. Actually there is a non-existence of a social life or leisure activities participated in by women outside the home. The number of males participating in leisure activities is much greater than females. However, data in Table 31 indicates that the majority of the passive category is formed by males. They simply look at or watch a variety of events.

Table 31. Frequency of Appearance of Males and Females in Activities in History Textbooks

YEARS	3	4	5	6	TOTAL
Domestic tasks for women	-	9	2	4	15
Domestic tasks for men	1	-	-	-	1
Child care activities for women	-	2	1	1	4
Child care activities for men	-	-	-	-	-
Leisure activities for women. Active:	3	-	-	-	3
Passive:	1	3	1	-	5
Leisure activities for men. Active:	6	6	16	3	31
Passive:	6	3	6	1	16
Political and social activities for women	-	-	-	1	1
Political and social activities for men	7	39	14	17	77

There is a variety of male leisure activities: chess (3, 141), theatres (4, 218), meetings (5, 27), restaurants (5, 24), fairs (5,193), gyms (5,107), races (5, 26), riding, swimming, dancing (4, 258) and hunting (5, 133). In contrast there are only a few
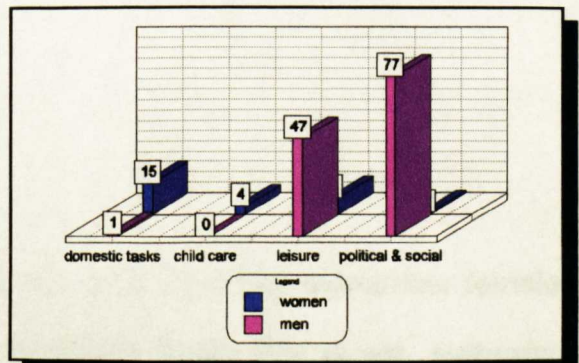
Figure 25. Frequency of Appearance of Males and Females in Activities.

female leisure activities and most of them are restricted to indoors.

"However, there were occasions when even women participated in outdoors celebrations"   (4, 133)

In fact, studies have borne out findings that women's leisure tends to be home-based and domestic in nature, that women seem to operate under more constraints than men, and that this tendency is even more marked in the early establishment phase of the family (Talbot, 1979).
Even children's play follows the sex role stereotypes.

"Boys used to play in the neighbourhood hiding and chasing each other. Girls used to play with their dolls indoors".   (5, 61)

The textbook used in the 4th year presents the limits concerning the places and the activities of each sex very strictly.

"Men used to discuss public affairs or their personal problems. Women stayed indoors doing their housework and looking after themselves".   (4, 137)

This may be true historically but requires comment and discussion by the teacher and pupils of today.

10.7. Behavioural Traits

10.7.1. Social Behavioural Traits

According to Tables 32 and 33 (p. 241,242) males outnumber females in masculine as well as in feminine behavioural traits. This is not surprising, since males are the predominant sex in history textbooks. History as presented

in history textbooks is a list of wars and political events where men have first place.

Men are depicted as brave and heroic (Table 32, Total 97.8%). History is a description of men's heroic deeds. Very often the word 'hero' is substituted for the word 'man'.

"Many other heroes took partt with Jason in the dangerous trip".   (3, 170)

"Everyone admired the heroes, who were invited to the wedding".   (3, 175)

The textbook used in the 3rd year describes the heroic deeds of Hercules (8 chapters are devoted exclusively to him with titles such as: Hercules a great hero, The death of the hero, The hero goes to Olympus etc). In addition there is Theseus (4, 66), Leonidas (4, 102), Callimachos and Kynageros (4, 101), Evrytas (4, 107), Dienekes (4, 107), Pelopidas and Epaminondas (4, 173), Digenis Akritas (5, 109), Paleologos (5, 198), Fereos (6, 101), Karpenisiotis (6, 118), Papaflessas (6, 173) and Kaphalis (6, 180). Only two women are presented in this category. They are the heroic women of the Greek revolution in 1821, Bubulina and Mavrogenous to whose contribution is dedicated three lines (6, 124).

Men gained a reputation as winners of the wars, the battles and the fights in which they took part. As Table 32 shows there are 70 reports of men as winners.

"The winners were crowned with wreaths of wild olive".   (4, 48)

"The Spartians won in this war".   (4, 61)

"Theseas had a fight with him and won".   (4, 65)

"Pausanias had a glorious victory".   (4, 117)

"Agesilaos defeated Sparta's enemies".   (4, 169)

Another characteristic attributed mostly to men is cruelty. There are 58 references to men as being cruel and only to 5 to women (Table 32).

"The Germans reacted by imprisoning and torturing people, burning and destroying villages and towns".   (6, 280)

"It was the dictators who gave the order to the army to attack the students in the Polytechnic school".   (6, 297)

The textbook of the 3rd year presents female cruelty which coexists with witchcraft and slyness (for those reasons women were burned in medieval times).

"The witch Kirke transforms Ulysses' colleagues into pigs using magic tricks".   (3, 45)

"Medea kills Pelias with magic tricks".   (3, 172)

"Sirens managed to bewitch the passengers by singing to them".   (3, 198)

There is a large number of chapters dealing with the theme of ambition. The lust for power is a male characteristic (Table 32, 70 references). This lust is said to be a national characteristic of the Greek people and this lust for power has caused conflict and bedevilled the Greek nation throughout its history.

"Because of the different benefits of the part, the elders of the villages considered it as their own natural right for them to be the administrators. On the other hand, the military also wanted to participate in administration".   (6, 151)

"There was a conflict in the family of Paleologos for the power".   (5, 171)

"Hitler and Mussolini wanted to conquer the world".   (6, 289)

Men are described as possessing antisocial traits (Table 34, a Total of 28 references).

"Venetians tried to steal the marbles from the Parthenon".   (6, 22)

"The Christians attacked the ancient churches holding wooden sticks and stones in their hands".

                                                                              (5, 14)

"When the Vandals had entered ancient Rome, they stole and destroyed everything".   (5, 87)

Men have done every useful thing in our world. There are 78 references depicting men as productive. (Table 34, Totals)

"Solon, a kind wise old man, world-travelled, a merchant, and a poet made laws".   (4, 74)

There is a limitless number of men who contributed to the economic, cultural and social development of our society. Clesthenes (who evolved a new system of government 4, 80), Perikles (the 5th century was named after him and characterised by him: (4, 127), Phedias, Ictinos and Callikrates (creators of the Parthenon: 4, 139), Alexander (Alexander was named the Great in history after all his achievements: 4, 198), Constantinos (he succeeded in strengthening the Byzantine empire: 5, 36) and Capodistrias (he organised the Greek nation: 6, 191).

Men's opinions carry great weight. They are portrayed as advisors. (Table 34, Total 7 references).

"He advises his brother".   (4, 52)

"Hesiodos gives advice about everyday life and work".   (4, 54)

"Alkibiades advises the Spartans".   (4, 164)

Friendship between men has always been better through the ages. In history there are examples of great friendship between men.

"Achilles and Patroclos". (3, 189)

"The famous friendship between Pelopidas and Epaminondas has been written in history".

(4, 192)

"Apollo helped Hercules many times". (3, 178)

"They promised each other to hold their friendship". (3, 192)

"His life was in danger but he was saved by his friend Cletos". (4, 192)

Men are also described as quarrelsome and warlike (Table 32, a Total of 29 references).

"Achilles argued with Agamemnon and he did not want to fight". (3, 189)

Men are patriots.

"Everyone of them fought till death for their country giving in that way an example to the ages of patriotism". (4, 102)

Men are capable.

"He was able to box, to jump, to run". (3, 157)

According to feminine behavioural traits, women are presented as interested in their appearance (Table 33, a Total of 7 references). Men never seem to care how they look, but women have a great need to be beautiful. Clothing and physical attractiveness is virtually ignored in relation to men in the textbooks.

"Further down was her room where she used to dress and make herself up." (3, 109)

"As in our days, women used to comb their hair, to use make-up and wear fancy clothes and jewellery".   (3, 114)

"Hera, Athena and Venus argued about who was the most beautiful".   (3, 188)

Among a few chapters dedicated to women, one is related to female fashion. Women's greatest achievement throughout the ages is how to be elegant.

"Women today, Greek, French, Italian, grooming themselves and following the fashion, cannot imagine that ages ago the women in ancient Crete did the same thing".   (3, 114)

Both sexes are portrayed with nurturing and altruistic traits. But women are so altruistic that they verge towards self-sacrifice.

"Makaria sacrificed herself as a gift to the Gods".   (4, 16)

"I could die for Admetos, said Alkeste "   (3, 184)

Illustration from 3rd Year History Textbook, 1990, 64.
Women   are   always   interested   in   their appearance.

On the other hand, men, as they possess positions of great importance, are presented helping the poor.

"The emperor Justinian offered financial help to earthquake sufferers: in that year he abolished all kinds of ceremonies and expenses in the palace in order to help the earthquake sufferers with the money".   (5, 65)

Table 32. Behavioural Traits in History Textbooks

Social

Masculine Behavioural traits	3		4		5		6		TOTAL	
	w	m	w	m	w	m	w	m	w	m
Productive	-	3	-	20	-	35	-	20	-	78
Brave/Hero/strong	-	19	-	18	-	14	2	30	2	81
Ambitious	-	-	-	45	-	16	-	9	-	70
Cruel	5	7	-	23	-	11	-	17	5	58
Power thirsty	-	-	-	2	-	6	-	32	-	40
Antisocial	-	-	-	-	-	15	-	13	-	28
Quarrelsome	-	6	-	16	-	7	-	-	-	29
Leader	-	-	-	4	-	6	1	11	1	21
Mutual helper	-	5	-	6	-	1	-	2	-	14
Capable	-	2	-	4	-	1	-	5	-	12
Patriot	-	-	-	7	-	-	-	4	-	11
Friend	-	6	-	5	-	-	-	-	-	11
Fanatic	-	-	-	-	-	4	-	3	-	7
Advisor	-	-	-	6	-	1	-	-	-	7
Magnanimus	-	-	-	5	-	-	-	-	-	5
Competent	-	-	-	-	-	4	-	-	-	4
Hard working	-	2	-	-	-	-	-	-	-	2
Decisive	-	-	-	-	-	-	-	1	-	1
Adventurous	-	1	-	-	-	-	-	-	-	1
Disobedient	-	1	-	-	-	-	-	-	-	1
Arrogant	-	1	-	-	-	-	-	-	-	1
Faithful	-	-	-	1	-	-	-	-	-	1
Frugal	-	-	-	-	-	1	-	-	-	1
Mistrustful	-	-	-	-	-	-	-	1	-	1
TOTAL	5	53	-	162	-	122	3	148	8	485
%	8.6	91.4		100		100	1.9	98.1	1.6	98.4

Table 33. Behavioural Traits in History Textbooks

Social   I

Feminine Behavioural traits	3		4		5		6		TOTAL	
	w	m	w	m	w	m	w	m	w	m
Nurturing	2	3	2	-	-	3	2	1	6	7
Altruistic	2	5	1	1	-	2	-	-	3	8
Religious	-	5	-	-	-	-	-	-	-	5
Vindictive	-	1	-	1	-	-	-	-	-	2
Modest	1	-	-	-	-	-	-	-	1	-
Interested in appearance	5	1	1	-	1	-	-	-	7	1
TOTAL	10	15	4	2	1	5	2	1	17	23
%	40	60	66.7	33.3	16.6	83.4	66.6	33.3	42.5	57.5
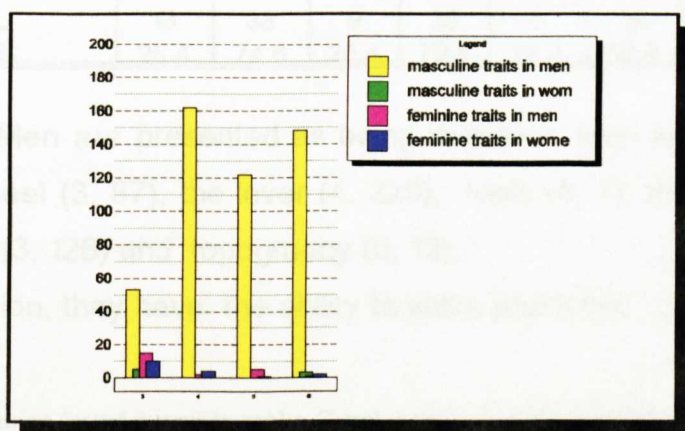
Figure 26. Social Behavioural Traits by Sex and Grades.

12.7.2. Intellectual Behavioural Traits

The intellectual traits refer mainly to males. Table 34 indicates that 124 intellectual traits are associated with men (88.2%) and only 27 with women (17.8%). Men are the mentally alert characters. The only intellectual trait women seem to have, is *"knowledge"*. On the other hand men appear not only to have knowledge but to be capable of using it inventively.

Table 34. Behavioural Traits in History Textbooks
Intellectual

Behavioural traits Masculine	3		4		5		6		TOTAL	
	w	m	w	m	w	m	w	m	w	m
Inventive	-	12	-	4	-	2	-	3	-	21
Educated	-	-	-	5	3	20	-	6	3	31
Knowledgeable	12	12	9	9	2	1	-	2	23	24
Wise	-	-	-	-	-	5	-	2	-	7
Problem solving ability	-	7	-	2	-	5	-	1	-	15
Intelligent	-	7	-	14	-	2	-	-	-	23
Questioning	1	-	-	-	-	-	-	1	1	1
Rational	-	-	-	1	-	1	-	-	-	2
TOTAL	13	38	9	35	5	36	-	15	27	124
%	25.4	74.6	20.4	79.6	12.2	87.8		100	17.8	88.2

Men are presented as being inventive. Men invented the saw (3, 132), the wheel (3, 87), the lever (4, 223), tools (4, 7), the steam engine (4, 223), writing (3, 126) and topography (6, 12).

In addition, they have the ability to solve problems.

"Capodistrias found a way to make Greek people consume potatoes".

(6, 195)

"Diokletianos found the way to administer the empire well".   (5, 32)

"Hercules found the way to clean Augean stables".   (3, 81)

Men are noted as intelligent.

"He uses his brain". (3, 59)   "With his clever mind, he managed..."   (3, 99)

There is special care shown in what concerns a boy's education.

"Philipus, being interested in his son's education, invited the most famous teacher".   (4, 187)

"Byzantines sent the boys to school."   (5, 61)

12.7.3. Emotional Behavioural Traits

In the history textbooks, neither women nor men exhibit any realistic range of human emotions. The natural emotions such as joy, pity and love only appear briefly the texts and thus they reinforce unreasoning cultural taboos associated with against expressing emotions and reduce those which can be expressed into sex role stereotypes.

Data in Table 35 indicates that men are depicted mostly with masculine social traits (94.8 %). Men are free to express feelings of anger and hate.

"Out of anger Achilles pulled out his sword against Agamemnon".   (3, 192)

On the contrary, these traits are forbidden for women who must be sweet and passive thereby conforming to sex role stereotypes.

It is remarkable that men are pictured displaying the feminine social trait of *"crying"*.

"Achilles cried for Patroclos' death"   (3, 19)

"The farmer has given a detailed account of his adventures between tears" (5, 153)

Fear is attributed to both sexes, but women express their fear more profoundly.

"The girls being frightened ran away"   (4, 2)

Table 35. Behavioural Traits in History Textbooks
Emotional

Behavioural Traits Masculine	3		4		5		6		TOTAL	
	w	m	w	m	w	m	w	m	w	m
Anger	-	3	-	5	-	1	-	3	-	12
Envy	1	-	-	3	-	2	-	1	1	6
TOTAL %	1 25	3 75	-	8 100	-	3 100	-	4 100	1 5.2	18 94.8
Feminine										
Pity	1	-	-	-	-	-	-	-	1	-
Joy	1	-	1	-	-	-	-	-	2	-
Tears	3	2	1	3	-	1	3	-	7	6
Fear	1	2	1	-	-	-	2	-	4	2
Jealousy	1	-	-	-	-	-	-	-	1	-
TOTAL %	7 63.6	4 36.4	3 50	3 50	-	1 100	5 100	-	15 65.3	8 34.7
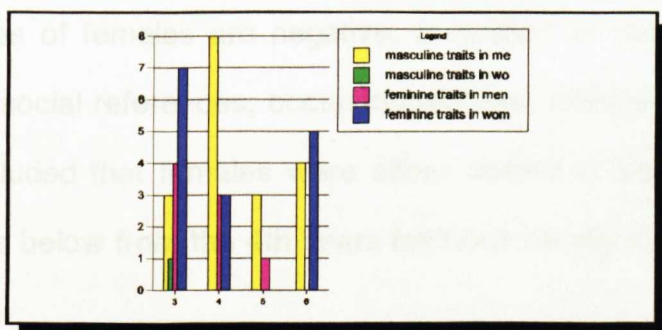
Figure 27. Emotional Traits according to Sex in History Textbooks years 3 to 6.

12.8. Conclusions

The teaching of history in schools can be seen as a powerful propaganda tool. Historical facts are open to various interpretations and the quantity of material from the past means that facts have to be selected carefully. This is particularly true at primary level, since primary history textbooks are vulnerable to generalisations and inaccuracies.

Data has indicated that the history textbooks which have been studied give an unbalanced picture of the past. Gender issues are deeply rooted in the content of history teaching. The primary school textbooks distort women's

experiences and omit almost all relevant information about half of our population. Basically textbooks present history from an almost exclusively masculine point of view. In young pupils' minds, history is only Alexander the Great and Great Constantinos. Overtly sexist textbooks overlook women's history, giving the traditional definition of historical significance and isolating them from the mainstream of history. Women were the outsiders in historical investigation.

Females are characterised by their absence. Women have figured chiefly as exceptions in the textbooks. Images of females are considerably fewer in number than images of males. Girls are even more absent than women in the history textbooks that have been analysed. It is significant that the images of females are negative, in relation to the images of males. The focus on social references, occupational roles, activities and behavioural traits has concluded that females were either absent or portrayed negatively. The quotations below from the 4th years textbook dlearly depict the negative image of women.

"When you deliver that baby, keep it if it is a boy, otherwise if it is a girl, drop it".

(4, 222)

"Delivery a boy meant happiness for the whole family, while a girl was considered undesirable".

(4, 257)

The history textbooks depict marginalised images of females as shadow figures, outside the energetic and enterprising world of males, who engage in a variety of interesting activities. The textbooks present the facts that males should rule, control, have all the leadership roles in the economic and political structure and in all professions as natural. There are only a few

"prominent" women but the history of these women does not tell us much about the significance of women's activities. The task of history textbooks is more than to present a few female public figures in positions of honour.

The reason for this omission is complex.

"Most historians are male and they have been trained to examine the past through a traditional male perspective which views history as a chronology of momentous wars, explorations, elections and so forth. Such perspective automatically excludes women as they never were generals, diplomats, explorers or presidents. Another reason for the omission of women is the constant use of the male pronoun to represent all of humanity. This standard usage has a double consequence. On the one hand it effectively eliminates the reality of women's involvement in events being described and on the other, it leads the reader to infer that women's historical experience was the same as men's..."   (Council on Interracial Books , 1985, 103)

Both sexes are exposed to this patriarchal ideology of male domination. Boys can identify more than girls with political leaders of the past or with other historical figures. The exclusion of women from the world of history deprives girls of opportunities to identify with other women, forcing them to identify with males. By selecting male historical figures, history textbooks limit role models available for women.

History must be reconstructed and women's history researched and studied alongside the history of men.

"In the first instance, women's history is about putting women back into the historical picture from which, through the predilections of generations of male historians for writing about masculine-oriented activities such as war, diplomacy and affairs of state, they had largely been excluded. The starting point for women's history must be recognition of the fact that women have a history of their own, and that gender like race, or class, or colour has been a powerful determining factor in the individual and collective lives of women. But women's history requires to

be much more than the enterprise of reclaiming and celebrating a lost past. Not only to avoid sectarianism and marginalisation, but to achieve its full and exciting intellectual potential, women's history has to be integrated completely into the discipline of history as a whole. Its aim must be to show that, once a female dimension has been added, our perceptions of the past are sensibly altered and our understanding of historical problems deepened"

(Hufton, 1985, 40)

Women have had an apparently small role in the past, due to our patriarchal culture. We cannot change facts and make women's contributions in history appear equal to the great deeds of men. We can not present the history of wars without mentioning men more often than women. However, history textbooks can show history and culture in different perspectives, changing the myth of female limitations. They can bring in the experiences and contributions of women. History textbook authors can give emphasis to social and economic factors and do something to demonstrate the consciousness that women were present during the past centuries. Textbooks writers can present a positive image of women with respect to their ideas, depicting them as active citizens in history.

Teachers should give careful thought to differences in the historical roles of men and women and pay attention to them. History must give value and meaning to the activities of women. The content of history textbooks should not be an endless chain of wars and politics. There is also cultural history, social history and the history of people's everyday lives. History textbooks must encourage pupils to appreciate the role played by ordinary women and men. The history books should aim to create new attitudes, being sensitive to the needs of both sexes thus providing an image of a world where men are not the sole owners.

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CHAPTER 11

THE IMAGE OF WOMEN IN SCIENCE TEXTBOOKS

11.1. The Image of Women in Science

Gender and science have been the focus of great concern and extensive study. The underrepresentation of women in science is well known and has been well documented (Kelly, 1981; Tobin & Garnett, 1987; Byrne, 1993). Research in the past has consistently shown that, in general, girls were not such great achievers in science classes as boys were. Between the ages of nine and fourteen, girls' achievement in science declined. Many factors have been considered responsible for the disparity between the two sexes in performance in scientific subjects as well in mathematics.

The proposed explanations fall into two broad categories: biological and social; it is the classic *'nature vs nurture'* debate.

"Modern sociology and philosophy of science contend that both science and gender are socially constructed, deeply influenced by their social, cultural and political environments".

(Haggerty, 1995, 7)

One first explanation is that sex differences are innate. There is evidence that boys perform better than girls in a variety of tests claimed to measure visual - spatial ability (Maccoby and Jacklin, 1974). Physical science specialists have frequently been shown to score higher in tests of spatial ability than arts, social

science or biological science specialists (Gray, 1981). But Maccoby (1970) has suggested that the development of spatial ability itself may be socially influenced; girls who perform well in tests of spatial ability are more likely to have been encouraged by their mothers to be assertive and independent (traditionally masculine traits).

Alternatives to biologically based theories are socialisation theories. Boys and girls are socialised in different ways and some of these are more favourable to science than others. Parents believe that boys will be good at physics and disapprove of their failure whereas for girls the failure is "something expected". As we have seen, there are different kinds of toys which are destined for the two sexes. The toys designed for boys (electric trains, chemistry sets and mechanical kits) are more effective for the development of scientific skills than the girl-toys (dolls, prams, teasets).
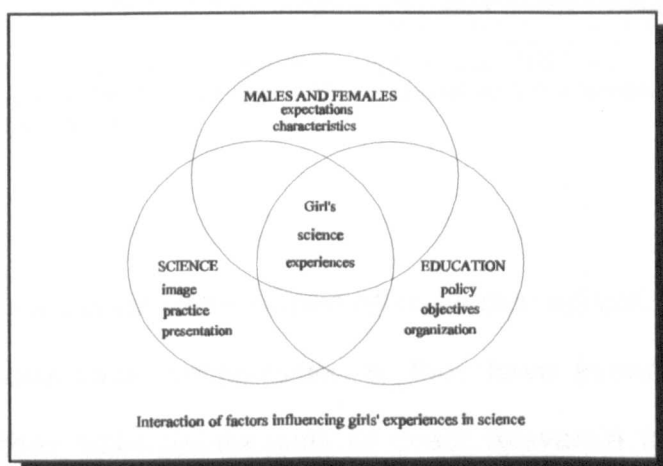
Figure 28 : Source, Harding, 1992, 27

Girls' toys seldom use electrical sources or equipment such as bulbs and transformers. The early experiences of boys therefore give a much more appropriate foundation for the physical sciences than do those of girls. An American study reported by Torrance (1963) illustrates how powerfully these experiences may constrain the performance of girls in science. He was investigating measures of creativity with children aged eight to eleven by asking them to suggest a variety of uses for science-based toys such as magnets, lenses and springs and to explain how they worked. The girls refused at first to

participate, objecting that these were boys' toys. When persuaded to take part, they performed much less efficiently than the boys did, in the judgment of adult observers.
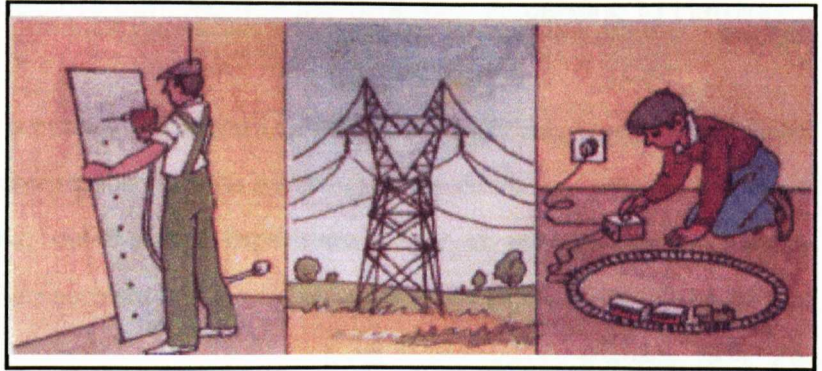
Illustration From Science Textbooks, 5th GYear, 1991, 157. Only boys and men are familiar with electrical and mechanical toys and appliances.

Most of the socialisation takes place outside (and often before) school. It is therefore likely that when boys begin school science, they have already developed manipulative skills; they have experiences of direct relevance for physics and technology, and they have developed interests in this area. They also encounter science curricula and textbooks written by men, filled with illustrations and examples drawn from male experience. The science teacher is most often a man, and school science is also object-oriented, so science acquires a masculine image. The described image of science therefore is in direct conflict with the values and interests developed by most girls. For both sexes femininity is linked to low achievement in science while masculinity is associated with high achievement (Spender, 1985,60).

"Schoolchildren think that science has to do with things, rather than people. Much of what they learn in science appears abstract and theoretical with little connection to their daily lives in the present or the future".
(Kelly, 1987, 16)

Feminist scientists believe that giving a more holistic and personal approach to science could make it more accessible and valid for all. The large

number of interrelated factors complicates the problem. According to Harding:

"Several factors have been put forward to account for differences in achievement between males and females in the physical sciences. Among these are differences in abilities, personality, the image of science, school context, out-of-school experiences, type of science course, teacher characteristics, methods of assessment and the option system with its associated guidance and counselling".   (Harding, 1983, 21)

As we have seen, research indicates that teachers have more academic interaction with boys in the classroom. Research specifically in male/female teacher/student interaction in science subjects shows similar findings. Females experienced fewer interactions. Females are called on less frequently and are asked questions at a lower cognitive level than those directed at males. Females receive less praise, criticism, or help from their teachers than males and have less social interaction with their teachers (Harding, 1983; Baker, 1987; Crossman, 1987; Gail-Jones & Wheatley, 1990).

In a piece of a research in fifteen schools by the DES about influence on girls' choices in science, the findings revealed that those factors found to have most influence on girls' choices in science fell into four main groups: 1) social and environmental influences 2) career choice and school guidance 3) teaching approaches and the science curriculum and 4) resources (staff, laboratory accommodation, equipment and materials) (DES, 1980, 9).

As we see in Table 38 the problem that exists between girls and science really has its roots in the relationship between girls and physics. The gap between the sexes in chemistry seems to be closing, while girls have always been overrepresented in biology.

Table 36: G.C.E. Advanced level passes obtained by school leavers In England (1986/7) expressed as percentages of the 17 year-old cohorts of males and females.

	Any subject	Maths	Biology	Chemistry	Physics
Males	16.9	7.1	2.5	4.5	5.6
Females	16.3	3.6	3.5	2.5	1.6
Ratio of males to females	1.0	2.0	0.7	1.8	3.5

Source: Harding, 1992, 10.

Some teachers perceive physics as being too difficult for girls. Thereby they imply that boys and girls are different and that girls lack some ability required to study physics. Teachers who consciously or subconsciously believe that the physical sciences are masculine subjects are likely to perceive girls as unsuited for science studies. The expectations of teachers might also be reflected in the subjective evaluation of pupils' classroom performance (Spear, 1987). Science teachers judge the science subjects to be less important for girls than do teachers of other subjects (Spear, 1985). Not only do science teachers depreciate the importance of science for girls compared with other teachers, but they probably underestimate the importance of science for girls compared with the girls' parents.

Girls and boys appear to prefer different styles of teaching. A report (Galton, 1981, 182) found that teaching styles are remarkably stable although some teachers did modify their style to suit different groups of pupils. Style I, "The problem solvers" referred to teachers who, by questioning, challenged the pupils to observe, speculate and solve problems; Style II, "The informers", referred to teachers who presented a "non practical, fact-acquiring image" and Style III "The Inquirers" used pupil-centred enquiry methods. Style I was popular with boys but not so with girls, while Style III was most effective for girls in maintaining their liking for physics and chemistry. More female teachers than men used Style III. Nearly half the men used style I. Girls may dislike the "direct-questioning, problem - solving" approach which they may meet most frequently in mixed physical sciences classes with male teachers. It has also been

suggested that the sex of the teacher may influence girls' choice of science by the presence or absence of role models for them to follow.

Another factor which is considered responsible for the reduced progress of girls in physics is the lack of self-confidence (Seymour, 1995). Child-rearing practices which diminish girls' self-confidence may be particularly detrimental to their science education. Ormerod (1981) found that both girls and boys tend to

Source: Kirkup & Keller, 1988, 162.

rate physics and chemistry among the most difficult subjects at school. But whereas boys opt for subjects and choose to study them in spite of their difficulty, girls tend to select the subjects they think are easier. Similar results were found by Sjoberg (1985) in a Norwegian study. Even girls who achieve good results in physical science seem to lack the self-confidence to choose these difficult subjects. Harding (1981) has shown that girls do worse in multiple choice tests - which again require self-confidence to select one correct answer - than on structured or essay type tests, which allow more room for qualification and hesitation. In his research (1994), Mallow showed that females aged 17 and upwards (American and Danish) felt anxious about science in greater proportion to their male counterparts.

Studies on classroom interaction reported that girls were being marginalised in mixed-sex classrooms, particularly in physical sciences. Vockell and Lobong showed in their research (1981) that girls in coeducational schools rate the

physical sciences as more masculine than the girls in a non-coeducational schools. Girls in single sex schools have higher preferences for science and mathematics courses than do girls in coeducational schools (Matyas, 1985). Research by Bristol University shows that girls who are taught GCSE physics in single-sex classes perform better and are more likely to take the subject at A-level, because they are more confident (Hinds, 1995, 12). Perhaps girls in single-sex schools do not feel some of the social pressures which affect girls enrolled in science and mathematics classes in coeducational schools.

As Kelly indicates:

"It is obviously easier to challenge the masculine image of science at a girls' school than at a mixed school. At girls' schools the physical science staff are more likely to be women, and all the senior pupils studying science are girls; the lessons can be geared to girls' interests without fear of disruption by the boys".   (Kelly, 1987, 15)

Recent evidence shows that in most schools boys are performing less efficiently than girls, even in subjects usually regarded as "theirs" -physics or design and technology (Dean, 1996, 19). A report says that over the past 10 years, girls have been entering the full spread of GCSE subjects (with the exception of chemistry and economics) in ever greater numbers (Pyke, 1996). In Scotland female participation in science has risen steadily and is now equal to that of male sat the point of entry to university in all subjects except engineering (Macleod, 1994, 2).

The most important criterion for pupils when selecting subjects is how useful they could be in a future career. The selection scientific subjects suggests that the student has considered their usefulness in relation to his or her professional choice. So, some girls refuse to select science subjects because

they believe that they will lead them into professions dominated by men. The counsellors and the people who can influence girls must be sensitive and responsible in offering non-sexist careers' guidance. This does not mean that all women must follow science careers but that they need a wider variety of options.

"Not everyone who studies science at school will use their qualifications in their working life. Science is also important as a part of general education, and here too girls are disadvantaged by their exclusion from physical science. We live in a technological society. Science education can give people a sense of control over their environment, rather than being at the mercy of the technology with which they are surrounded".   (Kelly, 1987, 8)

Science can transform the lives of women in a positive way. The equal opportunities policy should enable girls to get equal access to science education at all levels. Thereby, women would have equal access to employment in the field of science and technology. The technological society in which we live, would benefit from the scientific potential that women hide.

11.2. Science Textbooks

11.2.1. Review of Literature

In science, as in other areas of instruction, textbooks play a decisive role. In an analysis of texts across various areas of study, science textbooks depicted males with much greater frequency than females. Males were more often shown actively involved in experiments, conducting demonstrations, and playing other major roles in the area of science than were females (Weitzman & Rizzo, 1974).

Arnold (1975) evaluated a number of earth science texts with regard to the portrayal of females and males. She found females omitted from illustrations, ignored in discussions of the history of science, and not alluded to in earth science careers. Men dominated the illustrations, masculine terms and the pronoun 'he' pervaded the texts. There was an absence of female geologists, astronomers, meteorologists and scientists. There was a pervading assumption that scientists are predominantly male.

Some investigators contend that the language in the captions of the illustration also has an influence on a child's perception of gender appropriate behaviour. After a group of third graders was shown a number of illustrations and the masculine generic terms in the captions accompanying each illustration, some of the children did not consider females at all when presented with masculine generic terms and illustrations depicting individuals in various occupations (Harrison & Passero, 1975).

Other investigations have examined the relationship between student self-perceptions, peer and societal role expectations, and the science textbook. According to Schenck (1976) by the time a young woman graduates from high school she will have received so many cues about gender appropriate behaviour from books and other sources that she may be psychologically committed to culturally acceptable roles.

Heikkenen (1978) took a representative sample of 17 American high school chemistry textbooks published in the 1940s, 1960s and 1970s. One of the major aspects of sex bias that he considered was the relative frequency of male and female figures portrayed in either photographs or drawings. He found that male figures dominated all textbooks reviewed from the early 1940s through to 1975 revised editions. Three texts were found to be 100% male. Another surprising

finding was that the relative proportions of males and females had remained relatively constant throughout the period. His other main finding was that males were portrayed in these chemistry textbooks in a much broader range of activities.

Taylor (1979) evaluated three secondary level physics texts for sexist portrayals by examining the illustrations and prose for the representation of males and females. Taylor concluded that physics was depicted as a masculine area of study with little or no opportunity for female involvement. "...references to females were few, references to active females were even fewer and references to females in scientific activities were virtually nonexistent." (ibid, 279).

Walford (1980/81) examined primary school physics textbooks. The results showed that there is a disproportionately large number of illustrations showing men rather than women. On average, three-quarters of the relevant illustrations showed male characters alone, a further 14 percent showed both male and female and only 12 percent showed female characters alone. When women did appear in illustrations, they were far more likely to be seen in passive roles or in traditional feminine roles rather than as active participants in the world of physics. It was usually the girl who looked on while the boys did the important work. Within the text it was boys or men who were physicists - the pronouns 'her' and 'she' hardly occurred. Questions which pupils were asked to answer were usually about a 'man' or a 'boy' and they related problems in physics to typically masculine pursuits such as football or boxing.

Geoffrey Walford (1981) examined 23 popular chemistry textbooks used for O-level. While recognizable male and female characters were shown in only about 10-20 percent of the total number of illustrations, there were 258 illustrations of males and only 26 illustrations of females alone. Males were shown in situations

involving a whole range of different experiences. Females, when they were shown at all, were shown in fixed stereotyped roles. Girls were shown doing 'silly things' or domestic chores.

"In illustrations with both male and female characters it is J.P. Jule who is actively doing chemistry as he measures the temperature of a waterfall while his newly-wed wife looks on, and, in a similar way, it is A.L. Lavoisier who studied while his wife appears to be modelling a new dress".   (ibid, 19).

In an examination of secondary school science textbooks in general science, biology, chemistry and physics Ives (1984) found that males were represented in general science and chemistry books in a ratio (to females) of 9:5; in physics books by 8:6; in biology by 3:1. Authors also used predominantly male language (he, man, his, boys) in examples in the textbooks.

Powell and Garcia (1985) examined seven series of American primary school science textbooks published between 1982-1984. On average, 60 percent of the individuals represented were males, 35 percent were females and 5 percent of the individuals were unidentifiable. Women were shown as mothers, athletes, circus workers, clowns, dancers, and musicians. Females were also shown with greater frequency than males in roles such as sales clerks, teachers, and homemakers, but they were depicted less often than males as farmers, produce managers, and miners. When adult males and females assumed occupational roles in the same illustrations, the male typically assumed a more prestigious position. "When a doctor and nurse are illustrated together the doctor is male and the nurse is female" (ibid, 527).

Stott (1990) analysed seventeen geology textbooks. The text analysis revealed evidence of a disturbing discrepancy, in that men's activities far out outnumbered those of women. Nine texts failed to mention women. Males were

depicted in varied and exciting roles, whilst women were represented in domestic chores. More important was the sex typing of the roles; women were depicted as conventional and passive whilst men's occupations were shown as active and prestigious.

"Women appear to be excluded from the texts in at least three different and overlapping ways: the comparative absence of women and girls from illustrations and the reinforcement of sex-role stereotypes in them, the use of language which derives or excludes women, and the omission of women's historical and present contribution to the subject". (ibid, 82)

Rosser & Potter (1990) analysed five seventh grade science textbooks. The photographs, drawings, and outlines were evaluated to determine the ratio of females compared to males. The percentages and numbers showed that there were more pictures of males. When the pictures were analysed more carefully for active or passive depictions and representations of scientists, the male bias became more pronounced. Four of the five books pictured more males in active roles; all five of the books pictured more male than female scientists. Two of the books failed to include a description of a female scientist while three books failed to include a picture of a female scientist.

The Science Textbook for 6th Year classes.

11.2.2. Greek Science Textbooks

Science is taught in Greek schools in the two last years (three hours per week), by the class teachers, who have taken a compulsory science course during their training.

In the other four levels there are science references in the textbooks *"Ourselves and Our World"*. In these books there are lessons from chemistry, biology, geology and physics.

There are four books, two for each level. The purpose of the textbook is to widen the interests of pupils concerning nature, to pose questions, to exercise their observation skills and to initiate them in experiment and research (OEDV, 1988, 6).

11.3. Findings and Discussion

11.3.1. Appearance and Frequency of Male and Female Characters

As we have seen, the textbooks were analysed according to preset formulae. The results of the analysis appear below.

As shown in Table 37, the appearance of people in the science textbooks is rather limited but even here men outnumber women. The results reflect the masculine image of science textbooks. Women appear to be excluded from the texts. As we can see in Table 37, science textbooks feature 218 (93.2%) men and 16 (6.8%) women. Comparatively there are 13 (86.7%) boys and 2 (13.3%) girls. Therefore the impression is that Science is a world belonging exclusively to men. Throughout the series, the textbooks seem to imply that females have no place in the world of science. Boys control the action and it is them who demonstrate scientific principles of motion growth and energy.

Table 37. The Appearance and Frequency of Males/
Females in ScienceTextbooks

YEARS	5	6	TOTAL
Women in text %	5 5.3	11 7.8	16 6.8
Men in text %	88 94.7	130 92.2	218 93.2
Women in titles %	-	-	-
Men in titles %	-	-	-
Girls in text %	2 28.6	-	2 13.3
Boys in text %	5 71.4	8 100	13 86.7
Girls in titles %	-	-	-
Boys in titles %	-	-	-

11.3.2. Appearance and Frequency of Named Characters

Even when women do appear they remain nameless, while men gain some prestige by having their name mentioned. (Table 38) They are 'Kostas', 'Giorgos', 'Giannis' but women are mentioned as merely a girl, a mother, or a woman. There is one named female compared with 26 named males. Emphasizing males as named characters, coupled with the limited amount of information about the accomplishments of women in science and topics of interest to girls, constitute other subtle forms of sexism occurring in all of the texts.
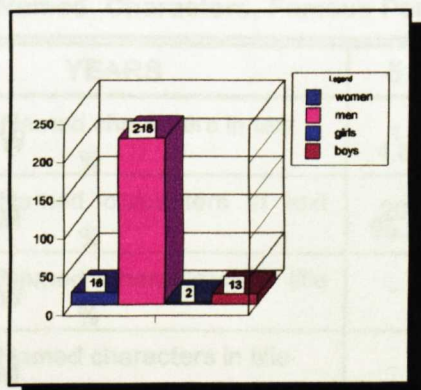
Figure 29. Appearance of Males and Females in Text.

11.3.3. Appearance and Frequency of Famous Persons

As shown in Table 38, 21 of the famous persons mentioned are males and only one female. Among the famous males appear scientists such as Democritus, Aristotle, Galileo, Mercalli, Endison, Fraglin, Bell, Mors, Einstein,

Newton and Jule. The only famous woman, Marie Curie appears to be little more than a helpmate for her husband's goals. Certainly the male sex provides more scientists than the female sex, but famous women in science rarely appear in textbooks or, as in the case of Marie Curie, are represented in a biased way.

There are also short biographies of famous people. Biographies play an effective role in projecting the ideal person in terms of personality, behaviour and achievement. By highlighting a person's life and work in textbooks, the children are encouraged to imitate the model, motivated to follow the principles demonstrated by the protagonist.

In science textbooks the biographies of the following famous people appear: Lavoisier (51, 22); Einstein (51, 74); Newton (51, 140); Joule (51, 180); Fleming (52, 30); Aristotle (61, 8); Heron (61 57); Edison (61, 168); Bell (62, 16); Faraday (62, 17); Marconi (62, 25).

Table 38. The Appearance and Frequency of Males and Females in Science Textbooks (Named Characters, Famous Persons, Principal Roles)

YEARS	5	6	TOTAL
Named characters in text W %	1 4.8	-	1 3.8
Named characters in text M %	20 95.2	6 100	26 96.2
Named characters in title W %	-	-	-
Named characters in title M %	-	-	-
Famous women in text %	-	1	1 4.5
Famous men in text %	7 100	14 100	21 95.5
Famous women : title %	-	-	-
Famous men : title %	-	-	-
Principal roles W %	-	-	-
Principal roles M %	-	-	-
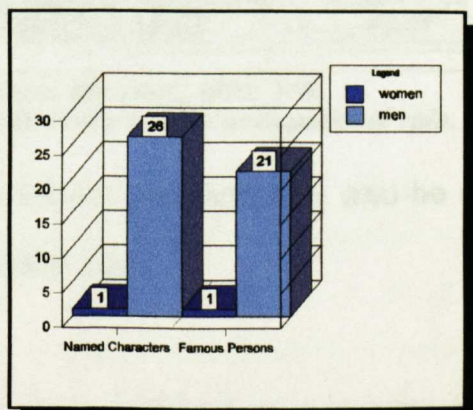
Figure 30. Named Characters and Famous Persons in Text.

11.4. Social References

11.4.1. Marital and Family Status

There are no references to marital status and there are only three references to family status (two for females and one for male).

11.4.2. Occupational Roles

From Table 39 it can be seen that there are 67(90.6%) references to male occupations and only 7(9.4%) for women. The adult world is a world of men.

It has already been mentioned how adult role models play an important component in sex role socialisation. By observing adult men and women, boys and girls learn what will be expected of them when they grow older. They are likely to identify with adults of the same sex and want to emulate them. Thus, role models not only present children with future images of themselves but they also influence a child's aspirations and goals. In science textbooks while boys
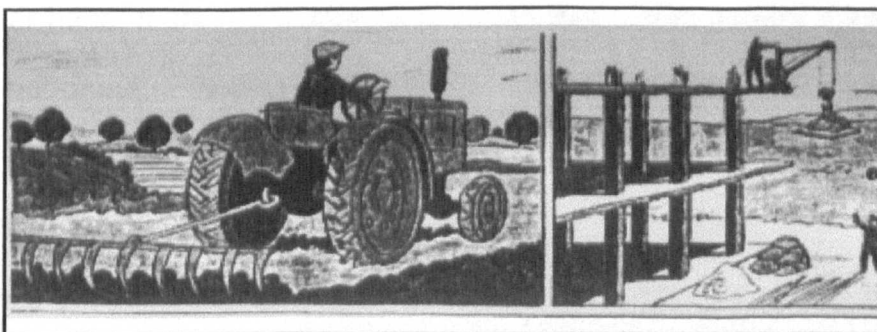
Illustration from Science Textbooks, 5th year, 1991, 149.
In textbooks men are presented in every kind of occupational role.

learn that an exciting future awaits them, the implicit message may also be a heavy responsibility. It is clear that men must have jobs.

Table 39. Social References in Science Textbooks

YEARS		5	6	TOTAL
Marital status %	W	-	-	-
Marital status %	M	-	-	-
Family status %	W	1 100	1 50	2 66.7
Family status %	M	-	1 50	1 33.3
Occupations in text %	W	-	7 16.6	7 9.4
Occupations in text %	M	32 100	35 83.4	67 90.6
Occupations in title %	W	-	-	-
Occupations in title %	M	-	-	-

W=women   M=men
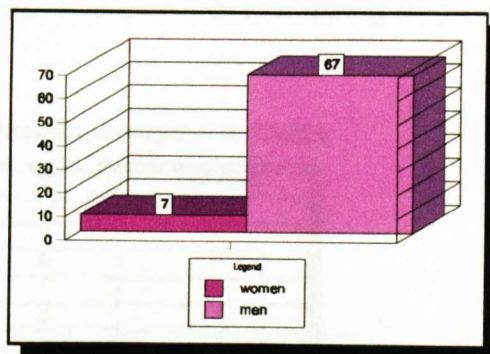
Figure 31. Social References: occupations.

Data from Table 40 show that males appear in 23 different occupations and females (Table 41) in three occupations: those of scientist, queen, and worker (the occupations of queen and worker are referred to in a lesson about the life of bees). The only female scientist woman is Marie Curie.

On the other hand, there are active, high status men's occupations such as physicist, astronaut, inventor, geologist, meteorologist, chemist, seismologist but there are also occupations such as sailor, worker, farmer, blacksmith and fisherman.

Boys have greater possibility of selection than girls and this choice is further supported and reinforced because in the reference of many male professions exalted the contribution of many famous men is exalted.

"Lavoisier was distinguished for his scientific research and discoveries. He is considered the founder of chemistry". (51, 22)

"Einstein stated the theory of relativity. His scientific work helped in the development of modern physics". (51, 74)

Women's contribution to science appears to be largely ignored. Describing male scientists only provides few role models for girls aspiring to be scientists.

Table 40. List of Occupations In Science Textbooks Assigned to Males

	YEARS	5	6	TOTAL
1	Scientist	2	12	14
2	Doctor	5	3	8
3	Physicist	3	4	7
4	Astronaut	4	-	4
5	Farmer	2	2	4
6	Pilot	3	-	3
7	Technician	3	-	3
8	Worker	2	-	2
9	Philosopher	1	1	2
10	Inventor	-	2	2
11	King	-	2	2
12	Astronomer	1	-	1
13	Fisherman	1	-	1
14	Sailor	1	-	1
15	Geologist	1	-	1
16	Meteologist	1	-	1
17	Chemist	1	-	1
18	Teacher	1	-	1
19	Blacksmith	-	1	1
20	Newsreader	-	1	1
21	Shepherd	-	1	1
22	Apiarist	-	1	1
23	Seismologist	-	1	1

Table 41 List of Occupations In Science Textbooks Assigned to Females

	YEARS	5	6	TOTAL
1	Queen	-	3	3
2	Worker	-	3	3
3	Scientist	-	1	1

11.4.3. Type of Environment

Not surprisingly, men appearing at work number 26 (96.3%) while women appear only once (3.7%). Work and especially the field of sciences are apparently not open to women. These narrow stereotypes impose a severe limitation and an unnecessary force on the goals and the aspirations of girls as well as boys at a most critical period of their lives.

The other sphere where we can find men is outdoors (11, 100%) a sphere which also belongs exclusively to men. Women are totally absent. Men undertake the responsibilities and monopolize the field of work as well as

outdoor activities. Women are seem to be absent even from the house, an area exclusively belonging to them. Naturally this is justified since science textbooks refer to a scientific world where women have no place!

Table 42. Social References in Science Textbooks
Type of Environment.

YEARS	5	6	TOTAL
Women outdoors %	-	-	-
Men outdoors %	8 100	3 100	11 100
Women at home %	-	-	-
Men at home %	-	-	-
Girls at school %	-	-	-
Boys at school %	-	-	-
Women at work %	-	1	1 3.7
Men at work %	13 100	13 100	26 96.3
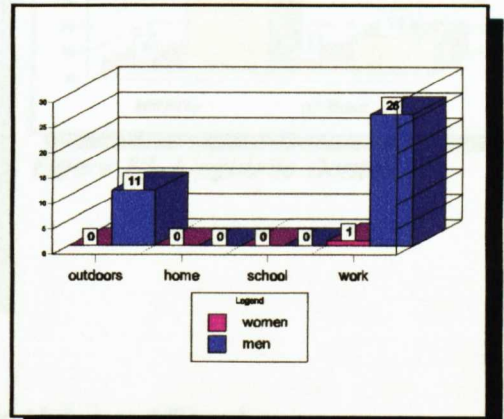
Figure 32 Social References: type of environment.

11.5. Linguistic Content

11.5.1. Number of Pronouns

The data in Table 43 continue the trend of having more males than females. The total number of masculine pronouns is 47 (92.1%) and of feminine pronouns 4 (7.9%).

11.5.2. Number of Attributes

The attributes of men and women portrayed in the textbooks are heavily stereotyped. As shown in Table 43 of the 19 attributes in the science textbooks 5 are assigned to females. Man is great, strong, wise, masculine, a founder and a leader. The attributes assigned to females are feminine and infertile, which characterize her positively and negatively respectively, since her real value is combined in her ability to reproduce and her feminine nature.

Table 43. Linguistic Content in Science Textbooks

YEARS	5	6	TOTAL
Number of pronouns assigned to females %	2 11.1	2 6	4 7.9
Number of pronouns assigned to males %	16 88.9	31 93.4	47 92.1
Number of attributes assigned to females %	1 16.6	4 30.8	5 26.3
Number of attributes assigned to males %	5 83.4	9 69.2	14 73.7
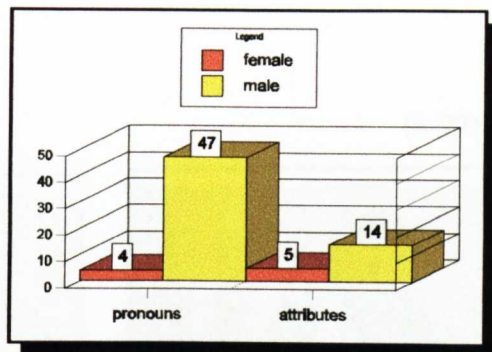
Figure 33. *Linguistic Content.*

Table 44. List of Attributes Assigned to Males and Females

MASCULINE		
SOCIAL	INTELLECTUAL	EMOTIONAL
Founder	First	Wise
Great	Masculine	
Strong		

FEMININE
Feminine
Infertile

11.6. Activities

As male characters feature more often than females in science textbooks it is not surprising that activities are associated with men. The number of activities is narrow while women do not appear in any activity. Male characters appear in 9 leisure active activities and 3 social and political activities. Man is shown to take advantage of his leisure time by fishing (5, 123), skiing (5, 126), running (5, 125), horse-riding (5, 132), biking (5, 133), swimming (5, 97) and diving (6, 151).

In social and political activities men are presented having ecological and environmental sensitivities..

"Boys are interested in the misuse of nuclear energy" (6, 27)
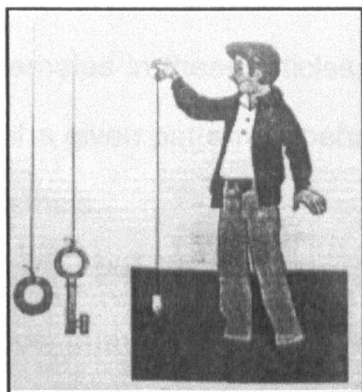
Illustration from Science textbook, 5th Year, 1991, 135
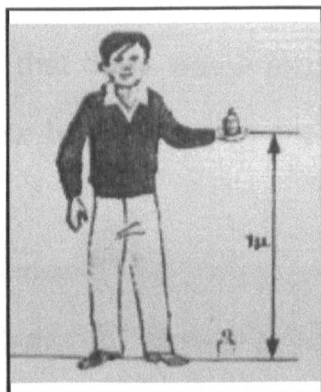
Illustration grom Science textbook, 5th Year, 1991, 149.
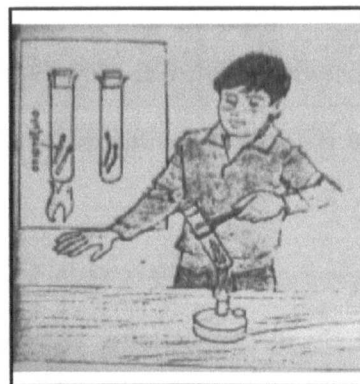
\llustration From Science textbook, 6th Year, 1990, 125.

Boys dominate Science experiments.

In addition, men who have political authority try to find solutions to problems.

"Nowadays the leaders of many countries meet together very often. In these meetings they discuss and think how to find ways of solving their differences peacefully". (6, 27)

Table 45. Appearance of Males and Females in Activities in Science Textbooks

YEARS	5	6	TOTAL
Domestic tasks for women	-	-	-
Domestic tasks for men	-	-	-
Child care activities for women	-	-	-
Child care activities for men	-	-	-
Leisure activities for women. Active:	-	-	-
Passive:	-	-	-
Leisure activities for men. Active:	8	1	9
Passive:	-	-	-
Political and social activities for women	-	-	-
Political and social activities for men	-	3	3

11.7. Behavioural Traits

11.7.1. Social Behavioural Traits

As we have seen, male characters appeared more frequently than females in these articles, so that there was a proportionately greater likehood of a given pattern of behaviour being associated with a male rather than with a female.

Data from Table 46 indicate that the progress of science is exclusively due to men. The only contribution of women in the field of sciences is that of Marie Curie and the discovery of radioactivity. Men's contribution to sciences has been continuous and constant since ancient times. So,

"Heron constructed the first steam-turbine".   (6,57)

"Democritus is considered the founder of atomic physics".   (51, 36)

Man's contribution continued into modern times too. Hence,

"Galileo discovered the telescope".   (62,54)

"Mohrs discovered the telegraph".   (62, 15)

"Bell discovered the telephone".   (62,16)

"Marconi discovered the wireles telephone".   (62,24)

Table 46. Behavioural Traits in ScienceTextbooks

Behavioural traits	5		6		TOTAL	
Social	W	M	W	M	W	M
Inventor	-	11	2	21	2	32
Antisocial	-	1	-	-	-	1

Intellectual

Intelligent	-	-	-	2	-	2
Problem Solving Ability	-	-	-	2	-	2
Educated	-	-	-	2	-	2
Total	-	12	2	27	5	39

11.7.2. Intellectual Behavioural Traits

Men have the ability to solve problems. Thus,

"Scientists managed to control the fission of the nuclei of uranium".   (6, 22)

"Man constructed windmills in order to move mill-stones and to grind wheat or to raise water from wells"   (52, 115)

They are clever:

"Newton expressed the idea that there are powers exercised among all the celestial bodies".
                    (5, 140)

They are educated:

"He studied Physical Sciences in Italy".   (6, 24)

"He attended lessons in physics and chemistry. With constant study and research he made important discoveries".   (62, 17)

11.8. Conclusions

Science textbooks give children the impression that no woman has or can play a role in building our scientific knowledge. The scientific world is presented as a masculine domain. Males' mastery over the physical and scientific world is assured. All scientists are male and only men do scientific work.

Illustration from Science textbook, 6th year, 1990, 50.
The lesson concerns liquefaction. Mother is presented in her traditional role wearing an apron.

Science textbooks describe the scientists as *he* and address the pupil as *he*. The portrayal of males is far more complete, and therefore far more attractive, than the portrayal of females. This kind of sexism may deter young girls from pursuing careers in science. Science textbooks facilitate males' participation in science but for females the way to science seems to be closed. Dominant male images have an alienating affect on girls and may leads to lower achievement and avoidance of this subject, preventing girls from having the same learning opportunities as boys.

Science should and can provide the same opportunities to boys and girls, equal chances of participation in the lessons and in the activities included within the framework of their experience and interests.

Meaningful contributions of women to science need to be discussed in science textbooks. Authors of science textbooks should ensure that new textbooks present a more balanced image of the two sexes. Teachers must take an active role in these changes. Science textbooks must encourage young students of both sexes and not just one at the expense of the other.

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CHAPTER 12

THE IMAGE OF WOMEN IN MATHEMATICS TEXTBOOKS

12.1. The Image of Women In Mathematics

Mathematics plays an important part in our daily lives. Looking at the current needs of society, it is obvious that there is an increased demand for mathematical knowledge.

♦ Mathematical language provides a framework for science subjects in school as well as for home economics, technology and geography.

♦ Mathematical language provides a means of communication, not only for the discipline it traditionally serves, such as physics and chemistry, but also for social scientists, who can be found in a wide range of occupations.

♦ Courses and jobs which in the past did not require mathematics as an entry qualification now do. Teaching itself is a good example.

♦ The economy needs an increased output of mathematics graduates moving into a range of jobs

♦ Increased output of such graduates is impossible without a strong, mathematically competent teaching force in the schools, colleges and universities.

(Hughes, 1991, 71)

There is well-documented literature referring to gender differences in mathematics (Fennema & Sherman, 1978; Burton, 1986; 1990; Hughes, 1991). Boys and girls are presented as having the same levels of performance in arithmetic tests in primary school or reported enjoyment of mathematics as a

school subject, but by the seventh grade a clear sex difference appears. By the tenth or eleventh grade, when mathematics becomes an optional subject, boys persist in choosing mathematics more than girls. It appears that the general societal message that mathematics is a male domain, is conveyed to little girls in the home and throughout their schooling. The social surrounding-parents, teachers, peers, and the general school organisation - have a decisive impact on a girl's opinion about mathematics. It is common for boys and girls to ask for help with mathematics homework from their father rather than from their mother, and in that way to reinforce the idea that females are weak at understanding and solving mathematical problems (Fox, 1980, 195).

In the past biological explanations were given for girls' poorer mathematical performance. Until recently, the three most common biological explanations for sex differences in mathematics were:

♦ a recessive gene on the X-chromosome that increases spatial ability in half of the male and a quarter of the female population.

♦ a hormonal difference

♦ different brain lateralisation in males and females

Because the sex differences in mathematical achievement are small at primary level - and sometimes girls have higher mathematics achievement than boys - and become important only during secondary schooling, it is less likely that they could be ascribed to innate biological differences.

Gaby Weiner (1980) believes that there are four spheres of influence on the performance of girls and boys in mathematics:

a. Cognitive factors: the extent to which genetic/biological features affect mathematical performance.

b. Socialisation patterns: this includes pre-school or extra-curricular activities,

child-rearing patterns, the persuasion powers of the media and advertising, and peer group expectations.
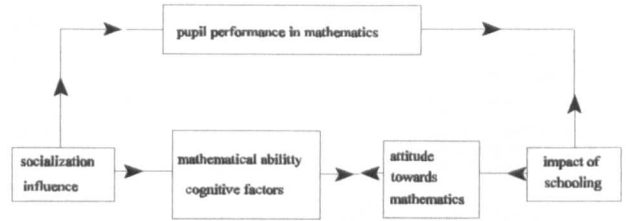
The major influences on pupil performance in mathematics

Figure 34. Source: Weiner, 1980, 77.

c. Impact of schooling: though not too much is known about the way in which any sex bias in curriculum areas or in textbooks and reading schemes influences the true ability of children, increasing literature on sexism in schools suggests that the organization and expectation involved in classroom life is a crucial contributor to the perceptions and attitudes of pupils and consequently their performance.

d. Pupil attitude towards mathematics.

There are many non-biological factors that may explain girls' apparent underachievement in mathematics. The cultural and societal environment, in which children grow up, has a significant effect on the expectations they develop. Influences outside school may affect the mathematical skills required at school. As we have seen in previous chapters, the traditionally masculine toys bought for boys are varied and complex whereas traditional female toys are simpler and encourage passive and solitary activities (Fennema & Sherman, 1978; Tracy, 1987).

One of the most popular explanations of the difference between the performance of girls and boys relates to the supposed lack of experience of girls with construction toys and hence what is referred to as their poor spatial ability. Spatial ability is the ability to perceive relations in space and visualize objects in

three dimensions which is taken to be crucial to the development of mathematical concepts and skills. Girls are considered to be lacking in this ability, which in turn explains why they may perform less well at mathematics. Boys are more likely than girls to have
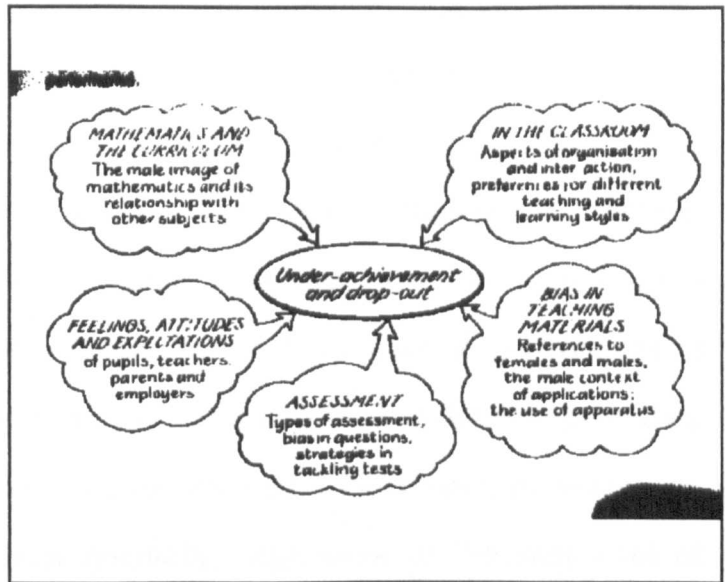
Figure 35. Source: ILEA, 1986, 13.

informal mathematically related experiences such as playing with scientific toys, participating in mathematical games, and reading mathematical books. Males were found to have learned considerable amounts of advanced mathematics either in a systematic way with the help of a teacher or parent or in a less systematic way through mathematical games, puzzles, and books, thus developing their problem-solving skills and mathematical reasoning ability (Maccoby & Jacklin, 1974; Walden & Walkerdine, 1982; Leroux & Ho, 1993).

Schratz (1978) has suggested that cultural influences may account for sex differences in mathematical ability. As girls and boys begin to show the greatest differentiation during adolescence, this maybe be due to developmental changes at this time in life. Social theorists have suggested that these changes are primarily the result of boys' and girls' initiation into adult roles which are dictated by society. In a society which differentiates roles in terms of gender, it follows that individual behaviour will be influenced by what is considered to be sexually appropriate. If society deems that science, mathematics and mechanical activities are the province of males, whereas literature, languages and social studies are

the province of females, these judgments will be reflected in the amount of effort expended by girls and boys on these subjects (Badger, 1981, 18).

The perception of a task as sex-appropriate may also affect pupils' expectations for success. Investigators in achievement motivation (Mednick, Tangri & Hoffman, 1975) have increasingly turned their attention to the ways in which individuals explain success or failure in a variety of tasks. It has been found that both expectations and attributions for success differ from boys to girls. Girls show an insistient tendency to underestimate their achievement, while boys do just the opposite. This happens generally, regardless of the real level of performance and is most obvious when tasks described as masculine are being undertaken. In such tasks girls believe that their success is a result of luck, but their failure is due to their inability (Badger, 1981, 20).

Fennema and Sherman (1977, 1978) proposed that the most important variable in the explanation about different performance in mathematics is the previous study of mathematics. They tested for "math background" and at the same time monitored the sex differences and the achievement in mathematics and in spatial visualization. Boys were found to score higher in the tests but only in two schools were the results significant. In addition, the differences did not seem to increase according to age or the grade of difficulty. They suggested that their findings were a sociocultural explanation of the sex differences observed in mathematics. They found two significant sex related differences: boys were more confident and had a greater belief in their abilities and mathematics has prevailed as a male-stereotyped scientific domain.

Pedro et al. (1981) have also suggested that the difference in the number of mathematics courses taken can account for sex related differences in mathematics achievement in adults. They investigated a number of attitudinal and

attributional variables that might be related to the decision to take mathematics courses by male and female students. They found that students' views of the usefulness of mathematics were significantly related to plans to take more mathematics courses. Mathematics anxiety was also related to mathematic plans but this relationship was stronger for males.

Hilton and Berglund (1974) suggested that sex typed interests are a possible cause of sex differences in mathematics achievement. In a longitudinal study, they investigated mathematical achievement as a function of gender, comparing it to changes in mathematics interest between male and female students. Hilton and Berglund found support for the generally accepted belief that males and females do not differ in mathematics ability at early ages, but males begin to excel at adolescence. Concerning interest in mathematics they found that:

"...more males are interested in mathematics and more females are of the opinion that the math classes were boring to them".   (ibid, 233)

Related to mathematical interest, Christopolos and Borden (1978) hypothesized that girls would do better in mathematics problems that were female-oriented and boys would do better in male-oriented problems. They presented students with problems, half of which were stereotypically relevant to boys and half relevant to girls. They found that girls did significantly better in the female-oriented problems than in the male- oriented problems. Likewise, boys did better in the male-oriented questions. Christopolos and Borden gained support for their belief that females' performance in mathematics would improve if their attitudes towards or interest in mathematics was strengthened.

Norman (1977) measured attitude toward arithmetic and mathematics in a sample of students from grades 2 to grade 10 and college students. He also suggested that sex differences in attitudes toward mathematics may account for associated differences in achievement. He found that from grade six onwards, males have more positive attitudes toward mathematics than females. He also found that there was an increasing dislike for mathematics from grade two to college for both sexes, but females' attitudes declined more dramatically. From grade nine onwards, sex differences in mathematics attitude were increasingly greater.

Dwyer (1974) supported the idea that sex differences in arithmetic test scores are partly dependent on the student's perception in arithmetic as sex appropriate or sex inappropriate. The students who felt that mathematics were appropriate to their sex were more likely to do better on arithmetic tests. She found that the sex role standards of children did influence the difference in mathematics achievement significantly for both sexes.

Achievement motivation may be another factor that can explain sex differences in mathematics performance. Achievement motivation can be defined as one of the major determinants in an individual's attempt to gain success. Although the level of achievement motivation for males was in accord with their effort to succeed, findings were contradictory for females (Leroux & Ho, 1993, 43).

Parsons, Kaczala and Meece (1982) have suggested that the expectations for success that students hold may be partly responsible for their patterns of achievement. Such a hypothesis is particularly significant in light of the finding that females tend to have lower expectations than males. They found that female students had lower future expectations for mathematics and also believed that

mathematics was more difficult.

Leinhardt, Seewald and Engel (1979) suggested that sex differences in reading and mathematics achievement might be related to differential teacher treatment of students during mathematics and reading classes. They found that teachers did make more academic contacts with girls in reading and with boys in maths. Furthermore, teachers spent more cognitive time with girls in reading and boys in mathematics. And, in general, teachers made more managerial contacts with boys than girls.

Horner (1968) proposed the motive to avoid success or fear of success as an explanation of sex differences in mathematics. She argued that since in our culture, achievement and the attainment of success in certain areas are considered to be more congruent with the male than the female role, for females the attainment of success may have negative consequences such as unpopularity, guilt, abuse, or doubt about their femininity. Mathematics, being related to the world of men, is a threatening subject for girls to excel in. Girls who are good at mathematics find that their gender identity is threatened.

Fox (1980) suggested that in the USA a major cause of sex differences in mathematics is that courses are optional in high school. Thus, the message conveyed is that mathematics is not equally necessary for everyone, and more girls interpret the message to mean it is not important for them. Sometimes they are helped to reach this conclusion by the type of advice they receive from parents or counsellors. Girls do not perceive the usefulness of mathematics for their future as clearly as boys do. This may be because girls are less career oriented or because girls who have career goals are considering only 'feminine' career areas.

The performance of girls in mathematics was, in the past, generally considered to be poor compared to that of boys. Although mathematical terms may be used outside school, school is the main site for the teaching and learning of that body of knowledge called mathematics. It is impossible to ignore this crucial aspect of the learning process especially since there is a growing body of work testifying to the different treatment and experience of boys and girls in the classroom (Wolpe, 1977; Delamont, 1980; Deem, 1980). This may not be so apparent in single-sex schools and there is certainly some evidence to suggest that girls achieve more in a single-sex environment (MacLeod, 1994, 2).

More recent evidence indicates that girls are catching up with boys in mathematics. Recent research by Jannette Elwood shows that the gap has now narrowed to boys gaining only 2 per cent more grades A-C than girls (Blackburne, 1995, 4). The report by Ofsted and the Equal Opportunities Commission showed: 1) Girls outperform boys at ages 7, 11 and 14 in national curriculum assessments in English. Achievements in mathematics and science are broadly similar. 2) Girls are more successful than boys at every level in GCSE, with more achieving at least one grade G and more passing in at least five subjects at grade C or above. 3) Girls are succeeding at GCSE in "boys' subjects" such as technology, mathematics and chemistry (Carvel, 1996).

The search for factors which can account for sex differences in mathematics performance has covered many areas of research from physiology to social psychology and to educational practice. In the end, few definite conclusions can be drawn. It is not possible to single out one factor as the prime cause for such differences. Instead, there seems to be a constellation of factors which influence performance in varying degrees.

12.2. Mathematics Textbooks

12.2.1. Review of Literature

Mathematics and science have often been thought of as neutral subjects. However, research shows that girls perceive mathematics and science as a masculine domain starting in the middle school, and that they internalize their failures in these subjects. Textbooks by omission reinforce these negative aspects.

" Word problems relate to male experiences, especially sports experiences; male proper names are used in word problems; and the scenarios themselves of the word problems do not engage females. Female mathematicians and scientists (except the omnipresent Marie Curie) are omitted; illustrations show obviously male hands demonstrating equipment and running experiments; the textbooks use the generic "he" and fail to recognize the presence of women in the history of science".

(O' Brien, 1988, 194)

Mlinar (1973) examined a first-grade mathematics textbook. She found that men outnumbered women in text and illustrations. In the first hundred pages she found females portrayed as Indian girls, queens, dolls, witches, and eskimo girls; male roles, on the other hand, included sailors, band members, kings, bakers, pirates, circus performers, knights, clowns and Indian chiefs.

Weitzman and Rizzo (1974) analysed primary school textbooks in five subject areas. In the mathematics textbooks most males were shown as mathematically competent while some of the females had difficulty with simple addition and were shown as baffled when counting from 3 or 20. Adult women were also stereotyped; they only dealt with mathematical problems such as of dividing pies and shopping and some were portrayed as mathematically

incompetent. Another feature of the mathematics textbooks was the frequent use of sex as a category for dividing people. For example, in explaining set theory, girls depicted as people who sew and cry. There was also strong sex stereotyping in the examples and mathematical problems.

Federbush (1974) analysed primary school mathematics textbooks. The findings revealed that the most obvious and normal activities for girls were cooking, sewing and observing others and for women housewifery in all its forms. Some of the few career roles depicted for women in mathematics books, except the primary school teacher, are witch or queen.

"When children of both sexes are pictured together in a classroom, there appears to be general equality - usually until one reads the problems carefully. "Susan could not figure out how to...' 'Jim showed her how...'" (ibid,180)

Rogers (1975) examined 8 high school mathematics textbooks to determine sexism in verbal problems. She found that men outnumbered women, were represented in more occupations, were older, and were more active.

Kepner and Koehn (1977) analysed twenty-four mathematics textbooks. In examining the illustrations the authors found only one book that equally represented the sexes and two books that showed more females (51%) than males. In twelve texts 60 percent or more of the people were males. Equal representation in problems occurred in only one textbook. Two of the textbooks included more females than males in the problems. In primary mathematics texts, males were usually shown in a greater diversity of occupations than females. Teacher, clerk, homemaker, and nurse were the occupations most often assigned to females. Typically female roles were passive rather than physically active, except when they participated in household activities. Females were not portrayed as having a full range of interests, traits, or capabilities. Few situations existed

where males and females participated together in an activity, except in family settings. Kepner and Koehn updated the study by examining three new series published between 1975 and 1977. In these texts males constituted 58 percent of illustrated characters, and females 42 percent.

Winifred Jay (1977) examined twelve primary school mathematics textbooks. Out of 4,104 pages forty-nine famous people were featured, forty-six of whom were male. The three famous women referred to in the textbooks were Queen Elizabeth I, Florence Nightingale, and Nellie Bly. There were 86 occupations for males and 18 for females. Traditionally father was the breadwinner. Mother was at home all day and she was the one who followed the advertisements and shopped for the family.

Steiner (1985) analysed three series of mathematics textbooks and two ancillary texts. The texts were analysed for differences in the number of examples, problems and illustrations that featured males or females as the main subject and sex differences in the number and types of occupation and recreational pursuits listed. The contextual settings of worded problems were also investigated. The results showed that whilst the differences decreased in the more recent textbooks, females appeared less often than males as the main subjects of examples, problems and illustrations, and that whilst males were depicted as occupying varied positions in the workforce, and as enjoying a wide variety of recreational pursuits, women were depicted as occupying very limited positions in the workforce and as having a narrow range of sex-stereotyped recreational interests.

Griffiths (1986) examined mathematics textbooks used in primary school. She found equal frequency of boys and girls but a huge discrepancy in the contexts. Girls were associated with having, spending or saving money for

sweets, dolls and records or baking cakes. Boys were associated with skittles, marbles, money, quoits, stamps, darts and soldiers.

In similar research Tara Tierney (1986) examined the Scottish Primary Mathematics Scheme and found 27 girls and 62 featured boys. Apart from the huge discrepancy in the actual number of males and females portrayed, the boys were all in active poses, while the girls were in passive ones. All the girls were wearing dresses.

Nibbelink, Stockdale and Mangru (1986) reviewed a primary mathematics series, from grade 3 to grade 6 and selected the three series most frequently used in Iowa in each of seven time periods beginning in the middle 1930s and concluding in the late 1980s. According to the authors, texts used between the middle 1930s and early 1970s more often depicted males and females in traditional roles than did textbooks employed in the late 1970s and early late 1980s. In addition, beginning in the late 1970s there was an increase of story problems depicting females in less traditional roles (e.g., washing a car) but no change in the number of story problems portraying females in traditional male roles.

In a study of French primary mathematics textbooks, human characters disappeared as the course became more advanced but boys and men were overrepresented in relation to women and girls, as if to indicate to children of both sexes that mathematics is essentially a man's subject (Michel, 1986).

Jean Northam (1987) analysed a series of primary mathematics textbooks. Using content analysis, she compared and contrasted the appearance of female and male images and activities. Her findings showed that although the sex role differences seemed to be diffused at first, a closer analysis of vocabulary revealed that whereas girls were equally represented, their roles were in marked contrast to the boys'. Illustrations showed girls as lacking individuality while boys

and men were shown as having distinguishing features. Famous mathematicians who were referred to in the books were all men.

Abraham (1989) analysed three mathematics texts. He found 192 male characters and 100 female characters. Females were often identified with activities such as buying domestic goods, cooking, playing tennis or hockey and fashion modelling. Males were rarely identified with such activities. Instead males were frequently cast in the role of important professional occupations such as doctors, teachers, fire officers and so on.

Walkerdine (1989) analysed two series of mathematics textbooks used in primary and secondary school. The results can be summarised as follows:

1. In the primary texts, the home and immediate outside world become the salient reference point. Girls and women are equally represented in primary materials as role models for girls to identify with: they hold positions of power within the primary framework. On the other hand, they reinforce traditional stereotypical roles already learnt (21.6% as opposed to boys' 6.6%); this regulates girls and women as passive recipients of knowledge.

2. Girls/women are overwhelming depicted in co-operative helpful and kind roles which mirror the importance of domestic tasks as a basis for primary computation: shopping, weighing and measuring. In addition women are generally portrayed as surrogate mothers; they may be teachers, air hostesses, shop assistants, but their main role is caring for others.

3. In the secondary stage, the world of girls and women virtually disappears from the text in everything but the category of identification, whereas male presence actually increases to 93.2 percent of the total average. Furthermore, any references to the role of women and girls become devalued by unscientific references to non-mathematical problems.

4.   Mathematics becomes a masculine province. The expounding of male mathematicians' theories sets readers firmly within a masculine framework. The sparse illustrations and gender references contrast markedly with the jolly mixed groups and active participants of the primary texts.

Garcia, Harrison and Torres (1990) investigated five primary mathematics series published in the middle 1980s. The investigators identified 6,429 illustrations in the five series. Data from the children category indicated that 720 (40%) of the individuals represented were male, and 761 (51%) were female. Of the total adults, 329 (58%) were male, 230 (42%) female. The findings of this study revealed that the mathematics series were less sexist than those published during the previous decade. Textbook authors seemed to have a more accurate balance with respect to gender.

In one study by Obura (1991) on Kenyan primary school mathematics textbooks, the findings revealed that females were absent from mathematics textbooks. Women remained at home, doing domestic chores. The few women depicted as working outside the home were portrayed in the classically feminine careers of typing and teaching. Grown females were usually represented as mothers, continually in the company of children. The socio-political images portrayed men as fully active members of society whereas women were part actors in the community.

In some Greek research (Matsagouras, 1982), mathematics textbooks from primary to secondary school were analysed. The results showed that even in books written by women, the references to men outnumbered those to women. The roles and professions given to women in mathematics textbooks were inferior not only in number (11% against 89%) but mainly in quality. The main professions and roles attributed to the female sex were:

1.   The roles of mother, wife, daughter, student, housewife, and that of sister.

2.   The professions of cleaning lady, saleswoman and teacher.

The nature of these roles and professions determines the kind of activities attributed to women such as home decoration, cooking and knitting. None of these activities demand further knowledge of mathematics, except the four basic skills of addition, subtraction, multiplication and division. On the contrary, men were shown to lend and borrow, to trade, to make complex calculations and to have professions which presuppose a knowledge of higher mathematics. In the books for secondary school the differences between the two sexes were greater than in the books for primary school. In some cases the female sex was totally ignored by the books at secondary-school level. Finally, there was the same unequal presentation in the illustrations of the two sexes.

12.2.2. Greek Mathematics Textbooks

In Greece mathematics is taught from the first class of primary school four times a week, for one hour. The teachers of the class are obliged to attend lessons in mathematics and lessons on how to teach mathematics during their training. According to the mathematics curriculum, its purpose is to help students to develop rational - mathematical thought and to perceive the environment in the sense of quantitative
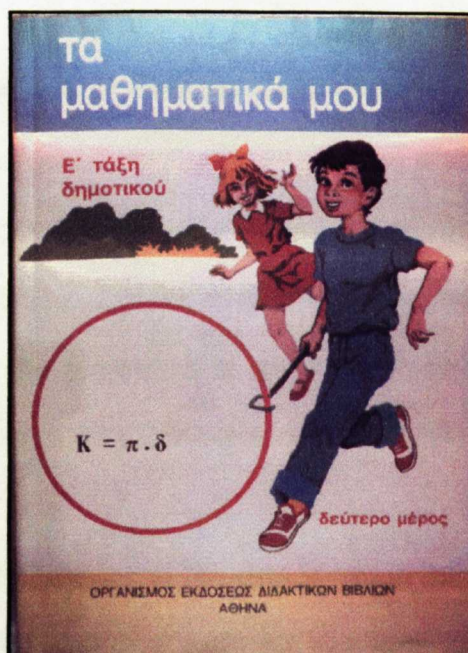
The cover of 5th year Mathematics textbook, 5th Grade.

dimensions and relations in order to be able to successfully confront difficult situations in the future. Among the specific goals of the lesson are:

♦   The learning of basic mathematical meanings such as: the conservation of

quantity, the concept of total, number, time, space, surfaces, volume and their proper use.

♦ The establishment of basic rational-mathematical meanings.

♦ The acquisition of certain techniques about how to perform calculations and of the ability to apply them when working out problems.

♦ The ability to use mathematics as a medium for the development and the best exploitation of critical thought and as an aid to the growth of confidence, self-discipline and responsibility.

♦ The acquisition of a positive attitude towards mathematics

(OEDV, 1987,109)

12.3. Findings and Discussion

12.3.1. Appearance and Frequency of Male and Female Characters

Similarly to the other textbooks, mathematics textbooks in Greece show a predominance of the male sex. As we can see in Table 47 the number of men appearing in mathematics textbooks is 477 (83.5%) compared to that of women 94 (16.5%). Data from Table 47 show that the presence of grown women is proportionately rarer than that of girls. There are 421 (36%) girls and 750 (64%) boys.

A second finding is that the ratio between males and females is much more balanced in the first year textbooks. In the 1st year textbook, for example, the presence of 2 women and no men can be noted while there is a slight superiority of girls against boys 41 (50.6%) and 40 (49.4%) respectively.

Table 47. The Appearance and Frequency of Males and Females in Mathematics Textbooks.

YEARS	1	2	3	4	5	6	TOTAL
Women in text	2	7	23	7	20	35	94
%	100	33.3	21.5	10	18.1	13.4	16.5
Men in text	-	14	84	63	90	226	477
%		66.7	81.5	90	81.9	86.6	83.5
Women in titles	-	-	-	-	-	-	-
%							
Men in titles	-	-	-	-	-	-	-
%							
Girls in text	41	140	87	51	35	67	421
%	50.6	46.5	33.9	38.1	20.3	29.5	36
Boys in text	40	161	169	83	137	160	750
%	49.4	53.5	66.1	61.9	79.7	70.5	64
Girls in titles	-	-	-	-	-	-	-
%							
Boys in titles	-	-	-	-	-	-	-
%							

Figure 36. Appearance of Males and Females in Text.

Overall, females do not figure largely in primary mathematics textbooks. They are represented at 29.5% (515) compared males at 70.5% (1,227). Grown women are the least depicted among the four categories (men, women, boys, girls).

12.3.2. Appearance and Frequency of Named Characters

Females are less frequently named than males. Table 48 reports 387 (62.6%) named males and 232 (37.4%) named females. Very often women in mathematics textbooks are referred to as "George's
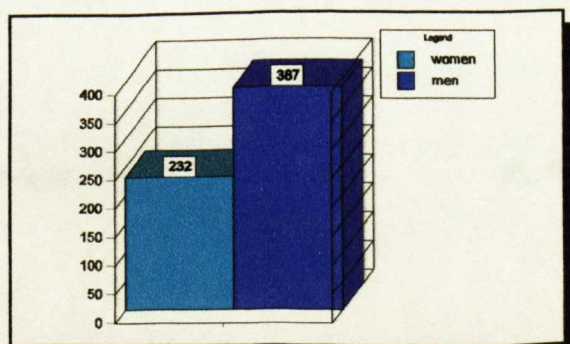
Figure 37. Named Characters in Text.

mother" or "two girls". As one progresses to higher levels, this proportion is observed to deteriorate and constantly fewer named women are referred to. This indicates a subtle form of sexism.

The problem of integrating girls into the world of mathematics is increased when the habit of identifying mathematics with male characters is established. In conclusion, the few appearances of named female characters in the mathematics textbooks are further undermined since named females are presented late in the books. In level 1, the first named female appears on page 42 while the first named males on page 9. In level 2, the first male appears on page 54 and the first female on page 158. Thus every school year girl students must wait for females to be introduced into the world of mathematics.

In addition to the timing of their first appearance and to the frequency of those appearances, there is a matter of order of introduction. Females are presented usually after males "Kostas and Heleni" (6_2, 4) "John and Chrysoula" (3_1, 61). Female images are therefore less frequent and less powerful than male images.

12.3.3. Appearance and Frequency of Famous Persons

The number of famous persons depicted is very low. There are four famous characters, all of them males. There is a famous Greek poet, Palamas (6, 150) and three famous men from Ancient Greece depicted in a mathematics problem.

"In what century did Aristotles, Pythagoras, Herodotus live?"   (6_1, 152)

Table 48. The Appearance and Frequency of Males and Females in Mathematics Textbooks (Named Characters,Famous Persons, Principal Roles)

YEARS	1	2	3	4	5	6	TOTAL
Named characters in text W %	13 52	61 47.2	52 41.9	36 35.6	27 27.8	43 30	232 37.4
Named characters in text M %	12 48	68 52.8	72 58.1	65 64.4	70 72.2	100 70	387 62.6
Named characters in title W %	-	-	-	-	-	-	-
Named characters in title M %	-	-	-	-	-	-	-
Famous women in text %	-	-	-	-	-	-	-
Famous men in text %	-	-	-	-	-	4 100	4 100
Famous women : title %	-	-	-	-	-	-	-
Famous men : title %	-	-	-	-	-	-	-
Principal roles W %	-	-	-	-	-	-	-
Principal roles M %	-	-	-	-	-	-	-

12.4. Social References

12.4.1. Marital and Family Status

Data from Table 49 show that there are no references to marital status. In contrast there are references to family status.

It is worth noting the great number of male characters whose family status is referred to. As data from Table 49 show there are 52 (46.4%) females and 60 (53.6%) males. In the textbook used in the 6th year there are the most reports about the family status of male characters {31(68.9%) men and 14(31.1%) women}.

In that way the role of the male is reinforced even more. In their attempt to improve the image of the two sexes the writers only succeed in emphasising

the role of the male even more. Thus, man is presented, apart from in his professional role, as father both in and outside the house. He is a father who seems to cover all the expenses:

"Nikos' father paid the rent for this month". $(6_2, 83)$

He pays the insurance:

"Dimitris' father has their house insured". $(6_1, 84)$

He undertakes the maintenance of the house:

"Father will paint the walls". $(6_2, 118)$

He also appears in activities outdoors:

"Father drove his car". $(6_2, 63)$

He is also presented as giving money to children:

"If father gives them 100drs each". $(6_1, 26)$

On the other hand, mother offers fruits and candies:

"That afternoon mother gave her another 4 candies". $(1_2, 88)$

Table 49. Social References in Mathematics Textbooks.

YEARS	1	2	3	4	5	6	TOTAL
Marital status W %	-	-	-	-	-	-	-
Marital status M %	-	-	-	-	-	-	-
Family status W %	2 100	4 80	12 50	6 60	14 53.9	14 31.1	52 46.4
Family status M %	-	1 20	12 50	4 40	12 46.1	31 68.9	60 53.6
Occupations in text W %	-	1 50	1 3.7	1 5	2 6.4	2 3.2	7 5
Occupations in text M %	-	1 50	26 96.3	19 95	29 93.6	60 96.8	135 95
Occupations in title W %	-	-	-	-	-	-	-
Occupations in title M %	-	-	-	-	-	-	-

W=women   M=men
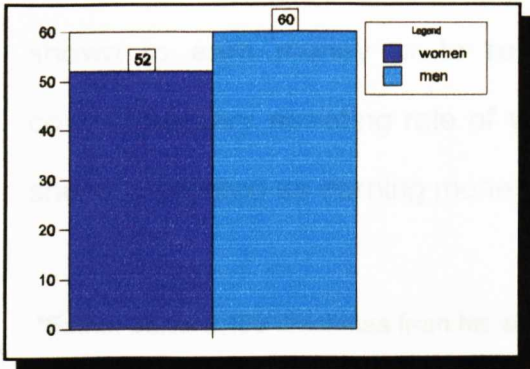
Figure 38. Social References: family status.
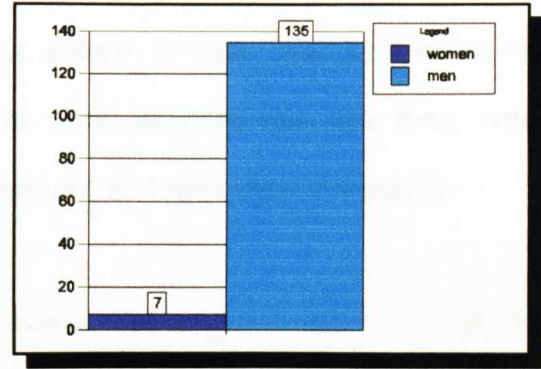
Figure 39. Social References: occupations in text.

12.4.2. Occupational Roles

The professional world seems to be forbidden to women. According to Table 49, there are 135 (95%) references of male professional roles and only 7(5%) to female ones. For males there is a wide range of choices. There are 33 occupations assigned to males (Table 50, p.311) and 5 (Table 51, p.311) assigned to females. Men can choose from the traditional professions such as: farmer, shepherd, electrician, fisherman, worker, butcher, driver and blacksmith and also from among professions of high prestige such as: astronaut, president, mayor, explorer and doctor. Girls imperceptibly receive the message that in this professional field no place exists for them. The traditionally female professions are left for them: teacher, typist, housemaid and worker. Surprisingly there also appears the *"male"* profession of bus driver, but this is low salaried and does not carry a lot of prestige.

Illustration From 6th Year Mathematics Textbook, 1992, 136.
In Mathematics Textbooks men have a variety of jobs.

It is characteristic that in mathematics textbooks, a woman is not shown to earn money or to receive a salary, a fact that underlines the complementary assisting role of women's work. And the only one time when she is presented as earning money the amount is lower than the man's.

"Father earns 2,150 drachmas from his work and mother 1,780". $(4_2, 69)$

The man seems to earn money.

"A farmer collected 125,000 drs from his produce". $(6_1, 26)$

"A craftsman receives 4 daily wages". $(6_2, 40)$

Man is the major party responsible for the care of the family. Woman works only when there is a lack of money. Nowhere do women work motivated by personal need and ambition. Even today in many Greek families it is considered "shameful" for a woman to work, because this affects a man's ego, as he is considered unable to support his family.

"A family man last month spent 1/2 of his salary on family food, 0,2 on the electricity bill, water e.t.c. and 1/5 on clothes. He deposited in the bank the rest of his salary". $(5_2, 28)$

It is therefore a reasonable consequence to consider man as the owner of property. Ownership is an indicator of social and financial status in the community. Men own land, farms, houses, vehicles and businesses.

The man is responsible for economic transactions since he has the greater buying power. Women buy mainly foodstuff and clothes.

"Mother bought apples and oranges".   (3_2,19)

The financial potential of a woman is only enough for offering children money for chocolates and candies or at most to buy fruits at the market.

Illustration from 4th year Mathematics Textbook, 1992, 6.
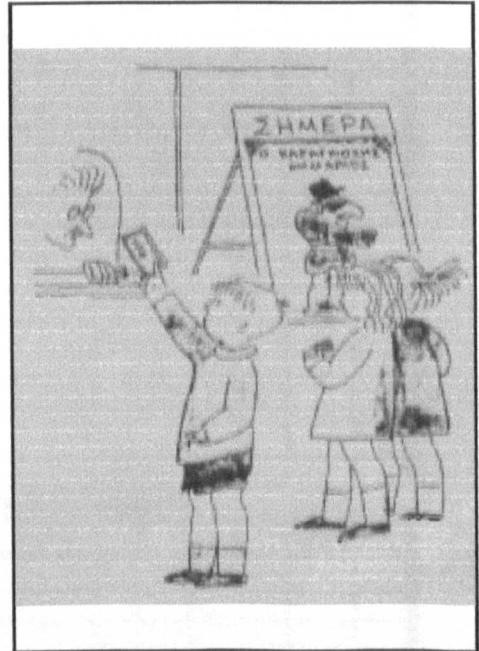
Illustration from 4th year Mathematics Textbook, 1992, 7.

Men always have money, so they can buy things or pay for the cinema tickets.

Table 50. List of Occupations in Mathematics Textbooks Assigned to Males

	YEARS	1	2	3	4	5	6	TOTAL
1	Worker			1	5	1	18	25
2	Farmer			4	1	8	8	21
3	Merchant			2	6	2	4	14
4	Shepherd			2	2	2	4	10
5	Bookseller			1	2	1	3	7
6	Teacher			1		3	2	6
7	Fisherman			2		1	1	4
8	Electrician			2		1	1	4
9	Greengrocer			4				4
10	Astronaut				2		2	4
11	Carpenter						4	4
12	Technician					3		3
13	Butcher			1		1	1	3
14	Grocer			2				2
15	Mayor				1			1
16	Newsreader			2				2
17	Florist			2				2
18	President					1	1	2
19	Doctor					1	1	2
20	Salesman						2	2
21	Postman					2		2
22	Explorer		1					1
23	Police Traffic Officer					1		1
24	Football Player					1		1
25	School advisor					1		1
26	Writer						1	1
27	Blacksmith						1	1
28	Pharmacist						1	1
29	Astronomer						1	1
30	Driver						1	1
31	Baker						1	1
32	Tradesman						1	1

Table 51. List of Occupations Assigned to Females

	YEARS	1	2	3	4	5	6	TOTAL
1	Teacher		1					1
2	Typist			1				1
3	Housemaid				1			1
4	Worker						1	1

12.4.3. Type of Environment

Data from Table 52 fit with traditional stereotypes. Males appear at work 102 (93.6%) and outdoors 64 (85.3%). Men are aware of the world outside: they travel, they work outside. Only women are found indoors. Even at school it should be noted that boys appear more often than girls. This places another limitation on the activities and potential experiences of women.

Table 52. Social References in Mathematics Textbooks.
Type of Environment.

YEARS	1	2	3	4	5	6	TOTAL
Women outdoors	1	3	2	1	1	3	11
%	50	27.2	13.3	10	8.3	12	14.7
Men outdoors	1	8	13	9	11	22	64
%	50	72.8	86.7	90	91.7	88	85.3
Women at home	-	2	1	-	4	1	8
%		100	100		100	100	100
Men at home	-	-	-	-	-	-	-
%							
Girls at school	-	4	-	-	-	3	7
%		57.1				60	38.9
Boys at school	-	3	-	-	6	2	11
%		42.8			100	40	61.1
Women at work	-	1	1	2	1	2	7
%		50	5.9	11.1	5	3.8	6.4
Men at work	-	1	16	16	19	50	102
%		50	94.1	88.9	95	96.2	93.6

Men play a predominant role in the public arena and prevail in the area of work. Men are presented free of obligations, able to travel, to be amused and to work while women are suffocated in their traditional roles.
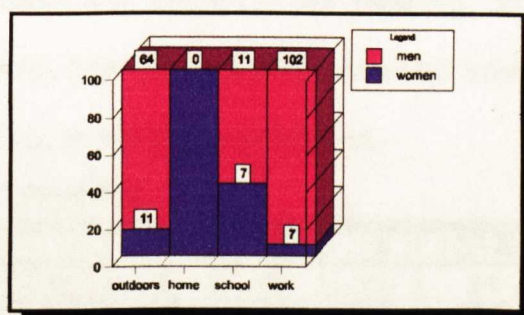
Figure 40. Social References: type of environment.

12.5. Linguistic Content

12.5.1. Number of Pronouns

The sexist prejudice of school textbooks is also extended to the language. A

subtle form of sexism is emitted

through the language. According to

Table 53 male pronouns outnumber

female ones. There are 270(83.6%)

male pronouns and 53(16.4%) female

pronouns. Male pronouns are
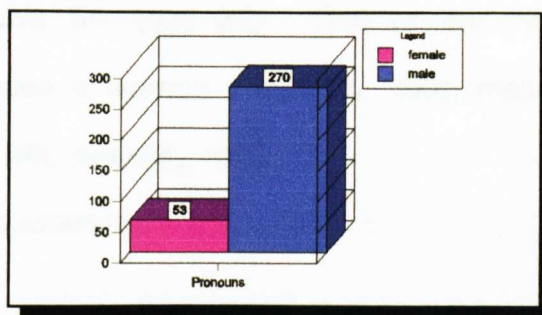
Figure 43. Linguistic Content.

predominant and used even when the passage is refers to women.

In many cases the male possessive pronoun is used to indicate ownership. For example, references such as: "his fields", "his car", "his house" are prevalent in the textbooks analysed. It seems that only men can acquire property since only they have the financial potential since in the books only men work and have economic rewards.

Male gender is used when both sexes are implied in the meaning. So the word μαθητής (mathitis=pupil) or μαθητές (mathites=pupils) are used implying also girl pupil or pupils (μαθήτρια-mathitria, μαθήτριες-mathitries).

Table 53. Linguistic Content in Mathematics Textbooks.

YEARS	1	2	3	4	5	6	TOTAL
Number of pronouns assigned to females %	5 26.3	-	15 21.7	5 12.5	13 17.8	15 13.8	53 16.4
Number of pronouns assigned to males %	14 73.7	14 100	54 78.3	35 87.5	60 82.2	93 85.2	270 83.6
Number of attributes assigned to females %	-	-	-	-	-	-	-
Number of attributes assigned to males %	-	-	-	-	4	-	4 100

12.6. Activities

The image of adult women is stereotyped and limited. Men predominate in outdoor activities while most women are inside. Females are engaged in the

traditional domestic care activities (Table 54, total 24). One of the main activities is household work. In the house a woman cooks (5_1, 100), makes marmalade (6_2, 67), makes pastries (5_2, 94), sews(5_2, 106).

Even little girls follow the example of their mothers.

"Katerina makes a pastry". (4_2, 65)

Another basic activity is to shop for food for the house.

"Mother bought eggs, milk and cheese". (6_1, 19)

When father is occupied with domestic care activities these usually refer to repairs and maintenance work.

"Giannis' father will line the kitchen walls with flagstones". (6_2, 64)

"Father will paint the walls". (6_2, 118)

Data from Table 54 indicate that males participate in much greater number than females in leisure activities.

"The traditional domestic division of labour and the care of children have direct consequences for women's access to leisure. It can severely restrict the time available for leisure, particularly when women are engaged in paid work as well, in a way that is not true for men. In contrast, the majority of men's non-work time is potentially available for leisure".

Illustration from 4th year Mathematics Textbook, 1992, 33.
Throughout the mathematics textbooks active boys compete energetically in sports activities.

(Green, Hebron & Woodward, 1990, 119)

Males participate in 49 leisure activities and females in 20 leisure activities.

Male sports become the focal point for identification setting and problem solving.

The activities females engaged in are predominately passive. Boys on the other hand spend most of their time engaged in physical activity. Boys play football $(6_1, 81)$, cycle $(6_2, 5)$, run $(6_1, 54)$, organize races $(6_2, 141)$, do weight lifting $(5_2, 28)$, climb $(5_1, 11)$, play volleyball, basketball, go skiing, swimming $(5_1, 87)$ and organize motor races $(5_1, 117)$.

Girls usually read.

"Vasiliki spent 40% of her money to buy a book, and 25% to buy accessories for painting". $(6_2, 103)$

"The novel that Heleni read". $(4_1, 137)$

Illustration from 5th year Mathematics Textbook, 1995, 42.
Studying is a feminine activity.

Girls often embroider.

"The girls wanted to make an embroidery". $(5_2, 53)$

Girls are occupied with necklaces and beads.

"Marina made a necklace". $(6_2, 20)$

Girls save money to buy dolls "Kaiti wants to buy a doll" $(3_1, 26)$ but "Kostas bought a spotlight and a horn for his bicycle" $(4_1, 85)$.

It is worth noting that girls save money in a piggy-bank while boys open a bank account and gain the interest.

"Martha had 1965 drs in her piggy-bank". $(4_1, 73)$

"What interest did Pavlos get after depositing 8,000 drs in the bank?". $(6_1, 92)$

"Vaggelis deposited 15.800 drs in the bank, and received the interest". $(6_2, 35)$

Boys learn to make investments early on, something that presupposes active participation and their tendency to be aware of the outside world,

whereas girls are immobilized in their house collecting their money in a piggy-bank.

There are few activities where males and females participate together.

Illustration from 5th Year Mathematics Textbook, 1995, 34.
When girls and boys appear in the same activities, boys are active while girls watch them.
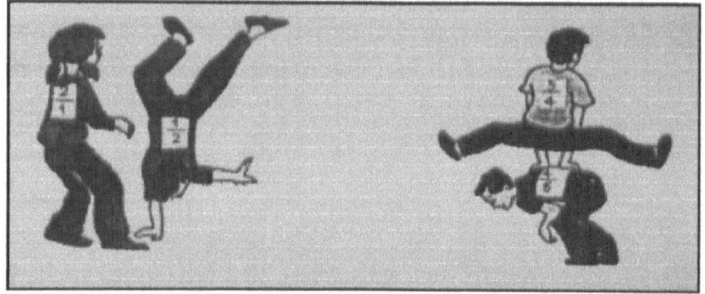
"Photis and Anna want to put their photographs in their album"

(5₂, 92)

Usually boys organize teams and compete in jumping, biking and running.

From Table 54 it can be seen that only males participate in political and social activities. In the social domain and in the public role, the part of a good citizen is emphasized in the men's role. Socio political images are composite pictures built on prestige and power. They are often associated with economic status and with educational attainment.

Men participate in parents' associations (6₁, 59), and they are managers of the appartment complex (6₂, 117).

They take part in elections.

"In the municipal elections the candidate received 444 votes and the second candidate..."   (4₁, 91)

They amuse theirselves with their friends

"Giannis treats his friends"   (6₁, 45)

Basically in mathematics textbooks, man is depicted participating in a series of economic activities and transactions that increase his power and prestige. Only men appear in saving and investment activities. Men rent .

"Three shepherds rent a pasture". $(6_2, 20)$

"Nikos' father pays the rent". $(6_2, 83)$

Table 54. Appearance of Males and Females in Activities in Mathematic Textbooks.

GRADES	1	2	3	4	5	6	TOTAL
Domestic tasks for women	-	2	4	4	4	10	24
Domestic tasks for men	-	-	3	-	1	9	13
Child care activities for women	-	-	1	-	1	1	3
Child care activities for men	-	-	-	-	-	-	-
Leisure activities for women: Active:	-	1	3	1	3	1	9
Passive:	-	4	1	1	2	3	11
Leisure activities for men: Active:	-	2	7	6	11	2	28
Passive:	-	1	6	5	-	9	21
Political and social activities for women	-	-	-	-	-	-	-
Political and social activities for men	-	-	1	-	1	11	13

They establish partnerships.

"Three artificers united their capitals and founded an artisanship". $(6_1, 53)$

They own shares $(6_2, 77)$. They insure their house $(6_1, 94)$. They take a loan $(6_2, 99)$ and of course they pay taxes $(6_2, 101)$.
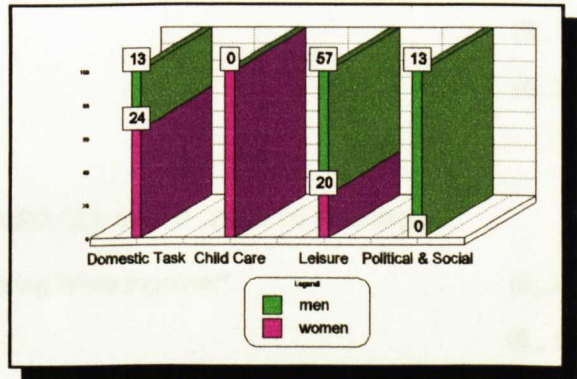
Figure 42. Appearance of Males and Females in Activities.

Men are fully active members of society whereas women are part actors in the community. The active males not only engage in work and business, earning cash or buying land and houses, they also borrow and take loans to develop their financial capacity, save and invest substantial profits. Women, in contrast, are mainly absent from these activities but when they do appear they are engaged in domestic activities. Where female activities are presented they do not allow a social engagement with serious issues.

12.7. Behavioural Traits

12.7.1. Social Behavioural Traits

In mathematics textbooks there are few behavioural traits. This was expected, since the greater part of them is concerned with mathematical theory and numerical operations. The existence of behavioural traits is mainly located in mathematical problems.

As we can see in Table 55 social and intellectual behavioural traits are presented. Men are presented as generous.

"Michalis has 120 cards and gave 24". $(6_1, 34)$

"Nikos gave 15 stamps out of his collection". $(6_1, 36)$

Men cooperate, something that women do not seem able to manage.

"Two farmers agreed to cultivate their neighbouring fields together". $(5_2, 26)$

"Two fishermen bought their fish together". $(6_2, 52)$

"Three fellow villagers bought a tractor togeter..." $(6_2, 66)$

It is characteristic that women appear to care only about their appearance.

"Marina has 2 skirts and 3 blouses. How many different combinations can she wear?" $(4_1, 93)$

"Mother needs 3,75 m. of material to make a dress". $(4_2, 139)$

12.7.2. Intellectual Behavioural Traits

Among intellectual traits the one that characterizes men is their problem solving ability (Table 55).

"Kostas and Heleni had to solve the equation $5Xa+3 =18$. Kostas worked it all right. What did Heleni do wrong?". $(6_1, 52)$

"Kostas constructed the framework of a cube with small reeds". $(6_1, 109)$

"Two engineers calculated the volume that the columns and the plates of a building have".

$(6_1, 159)$

"Kostas calculated how many centimetres are needed to cover the upper surface of a matchbox"

$(4_1, 41)$

"Pelopidas measured the length of the wheel's circumference and found it was 1,25m". $(5_2, 106)$

Furthermore boys are presented as knowledgeable.

"Giannis knows that both wheels of the bicycle have a circumference of 40cm.." $(6_1, 109)$

"Antonis supports that the quadrilaterals shown in the picture have some common characteristics and are divided into three kinds". $(5_2 73)$

"Photis is teaching his little sister the highway code. He made the signs out of cardboard and he started to explain them to her". $(5_2, 98)$

Table 55. Behavioural Traits In Mathematic Textbooks.

Social

Traits	1		2		3		4		5		6		TOTAL	
	W	M	W	M	W	M	W	M	W	M	W	M	W	M
Inventive												1		1
Friendly							1					1		2
Cooperative			2	2		1				1		4	2	8
Generous			1	1	2	5							3	6
Interested in appearance							2						2	
Careless						1								1

Table 56. Behavioural Traits in Mathematic Textbooks
Intellectual

Traits	1		2		3		4		5		6		TOTAL	
	W	M	W	M	W	M	W	M	W	M	W	M	W	M
Knowledgeable							1	2		4	1	6	2	12
Intelligent											1	2	1	2
Problem Solving Ability			4	5			5	6		5	6	9	15	25
Questioning							1							1

12.8. Conclusions

A degree of sex stereotyping exists in the mathematics textbooks as evidenced by the results of this analysis. The data seem to reinforce the old stereotypes about female inability to cope with technical or logical subjects. Males and females are seldom treated equally in these textbooks. The number of males identified was greater than the number of females. Males participate in a greater variety of activities and occupations than females. Females are not portrayed as having a full range of interests, traits, or capabilities. Man is the active member of the society who participates in a multitude of activities: he earns a salary, he is involved transactions with banks, with internal revenue services, with insurance, he purchases and possesses property, saves and invests profits. On the other hand, girls are shown as unable to solve even simple arithmetic problems. This is an image that discourages girls from learning mathematics and also conflicts with reality, where girls in primary school are better at mathematics than boys. Adult women appear in stereotyped images. In mathematical problems women only seem to be capable of dividing pies and doing the shopping.

The mathematics textbooks illustrate a world that denies girls' participation and hence creates an educational environment which disadvantages them. This can explain girls' views that mathematics is a male world. Mathematics textbooks must aim not only at the transmission of knowledge in the field of mathematics but also at the creation of positive attitudes about mathematics.

These results forecast a heavy responsibility for educators in general and for the classroom teacher in particular. Female mathematics teachers, who act as a role model, are a significant influence. Teachers who treat both genders

equally, provide a warm environment, and seem to provide the most *"psychologically safe"* environment that is favourable to girls' learning. Parental support and encouragement are also essential for females' success.

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CHAPTER 13

THE IMAGE OF WOMEN IN SOCIAL STUDIES TEXTBOOKS (OURSELVES AND OUR WORLD, GEOGRAPHY, POLITICAL AND SOCIAL BEHAVIOUR)

13.1. The Image of Women in Social Studies Textbooks

Women are not only hidden in history or religion. They are also hidden in social studies textbooks. The role of social studies courses is to train students in responsible citizenship. Instructional materials for a subject such as social studies must necessarily aim to shape children's attitudes for the future directions of society. It is reasonable to expect a social studies textbook to depict both ideal social institutions and an ideal society where women and men are active contributors in the socio-political sectors. However, social studies textbooks generally exclude females from their curriculum content, undermine the activities of females and thereby fail to meet the objectives of primary education.

Most of the social studies textbooks are concerned with *"man"*. They emphasise *"man"* and his relationship with the environment and women appear to be ignored as men's experiences are given priority (Franchi, 1987, 51). Traditionally geography has excluded women from research and geographical analysis. Geography as a discipline serves to enforce the status quo of men by providing geographical knowledge which is, on the whole, determined by men.

At present geography remains a male-centred subject, both in terms of the gender of those who structure its content through their teaching and research, and in terms of the nature of that content (Women and Geography, 1984, 129).

"Although geographers recognize the existence of women, they make little effort to investigate the role they play in society other than in terms of adjustment to a male-dominated and male-determined order."

(Women and Geography, 1984, 20)

Geographers seem to neglect, either consciously or subconsciously, women's role in society. The dominance by men in geography is a reflection of the dominance by men in society.

Geography remains sexist in both its method and purpose of research.

"The methods used in research may also be found to be sexist such as using data on men to describe the whole population or even, in some cases, to be extrapolated to describe women. Often gender differences are not acknowledged when collecting the data, differences which may be crucially important to the analysis.

(Franchi, 1983, 50)

Geography has been and still is a predominantly male profession. Men teaching degree level geography, are numerically dominant in almost all institutions, and

Few women lecturers

Higher percentage of women than of men to get jobs or promotion

Few women academics in senior posts

Few female role models for undergraduate women

Women postgraduates have limited access to contacts critical for later job opportunities and to joint authorship opportunities

Smaller pecentage of women postgraduates work in geography than men decide to do

Smaller percentage of women than men postgraduates have access to the "old boy" network

Possible chain of events explaining the low percentage of female academic geographers

Figure 43 . Source: Women and Geography Study Group of the IBG, 1984, 128.

also hold most of the positions of power. Women account for only 10 per cent of all the full-time lecturing staff (Women and Geography, 1984).

In the early 70's feminist geography started to develop. Its aim was first to make women visible in the field of geography and secondly to show that women did not have the same opportunities and possibilities as men, because they were limited by their sex role stereotypes. Feminist geography does not deal only with women but also investigates the way with which the relations between the two sexes are developed and how this influences the lives of both men and women.

"Feminist geography has presented its challenge on three levels, all of which are crucially inter-related. Firstly, it has questioned the concepts we use to explain the geography of society and has therefore contributed, by looking outside the conventional disciplinary boundaries, to new ways of thinking about social relationships. Secondly, it has shown that the materials and methods used in teaching often work against women and girls. Consequently, feminist geographers have begun to construct alternative forms of teaching as well as different source materials. Finally, the positions of women in the educational labour market has been publicised and feminist geographers have linked this to the investigation or marginalisation of women within the subject matter. Underlying all three points is a common theme: the inequality of power between men and women. The future of feminist geography is to broaden the relevance of its challenge by developing its explanatory basis".

(Whatmore & Little, 1983, 6)

Feminist geography uses a two-way approach. The first, called the *"passive"* approach, examines books and focuses on the parts where women are treated negatively or unfavourably. The second approach is the *"active"* approach which makes an attempt to use books that promote equality between two sexes.

13.2. Social Studies Textbooks

13.2.1. Review of Literature

Frisof (1969) analysed five social studies textbooks for grades one to three published between 1962 and 1969. She found that men were shown in over 100 different occupations, while women were shown in fewer than 30. Only men were shown as leaders of organisations, while only women were shown as volunteers. Family decisions (timing of vacations, places to live, etc.) revolved around the father. All first-named authors of the texts were men.

Karen DeCrow (1971) analysed social studies books and readers published by 10 companies for students from kindergarten to third grade. In these books, working women were shown as teachers and nurses and were always single. Men were always shown working full time; they made family decisions and did *"masculine"* chores (such as gardening or taking out the garbage); women did *"feminine"* chores (cooking, washing, caring for baby). Older children were boys and younger children were girls.

Weitzman and Rizzo (1974) analysed the textbooks used in the average classroom in the United States in grades one to six in five subject areas. The major focus of the analysis was the textbook illustrations, as they provided a single uniform indicator with which to compare the different series. They found that social studies textbooks were the only series with a strong family orientation and they had the largest percentage of females. There were many warm and tender illustrations of fathers and sons. It should be noted, however, that fathers taught their sons but not their daughters. Boys learned vocational skills and girls domestic skills.

In research by Westaway (1989) about forty geography texts were examined. The conclusion was that textbooks display a sexist image. In illustrations, for example, there is a preponderance of illustrations depicting male characters. In one text, of 63 illustrations showing either males or females, 55 showed male characters. Males are presented as decision-makers or in active roles, while women were usually shown as subservient, passive participants in society.

"Geography texts do not, in general, have a lot to say about the role of woman in society. What they do have to say generally reinforces the stereotypes of women as shoppers, pram pushers, homemakers etc." (Westaway, 1989, 24)

13.2.2. Greek Social Studies textbooks

The course *Ourselves and the World* is taught in the four first years of primary school for three hours per week. Geography and Social and Political Behaviour are taught in the last two classes, one hour per week respectively. The lessons are taught by the class teacher. The aim of the environment course is the study and the comprehension of the social and biophysical environment. For the first 4 years there is a combined approach, in

The textbook "Ourselves and Our World", 1991.

which are embodied educational elements of social, religious, economic, cultural, historical and national life, as well as aspects from the inorganic and organic

world affecting the needs and the pursuits of man (OEDV 1987a, 151).

Contents of the course according to the official curriculum are:

♦ Man among his fellow-men

♦ Man in his geophysical environment

♦ How men communicate

♦ Man and plants

♦ Man and animals

♦ How man satisfies his needs

♦ Man and machines - applications

♦ Man, time and evolution

♦ Sources of goods: Production and consumption

♦ Study of natural phenomena (OEDV, 1987b, 151-217)

One of the aims of the programme is to familiarise pupils with their immediate environment and that beyond them and to promote an understanding of the mutual dependence between the geophysical environment and man on a universal scale. In addition, the programme tries to cultivate love towards the native country and to create a positive attitude towards it.

Contents in the geography syllabus are:

♦ Geophysic study of the earth

♦ Man's life in different natural environments

♦ People and countries

♦ Productive sources of earth-energy sources

♦ Communications-Transport-Commerce

♦ The great problems of humanity

♦ Greece's position in the world (OEDV, 1989, 143)

The purpose of the programme of Political and Social Behaviour is to help pupils:

♦   - to acquire knowledge of the organisation and the function of Greek society and the values on whichi is based.

♦   - to understand the importance of social and political institutions for the individual and the group.

♦   - to develop critical thought in regard to the problems of modern society.

♦   - to develop social consciousness in order to participate responsibly and creatively in the life of a democratic society.

♦   - to acquire the necessary sensitivity towards the universal community.

(OEDV, 1987b, 221)

In this chapter I will study four books from the programme *Ourselves and Our World* (1st, 2nd, 3rd, and 4th years), two books from the Geography programme (5th and 6th years) and two from the Social and Political Behaviour course (5th and 6th years).

13.3. Findings and Discussion

These books should approach society and its problems more directly than other textbooks in the school curriculum. It is supposed that social studies textbooks are intended to produce socially desirable attitudes in students and promote the progress and improvement of humanity.

13.3.1. Appearance and Frequency of Male and Female Characters

According to Table 57 the predominance of men is obvious, even in the Social Studies Textbooks. Among 2,817 characters only 173 (6.1%) are women. The same is also observed in the appearance of men and women in titles. Only two females (2.2%) appear in titles compared to 88(97.8%) males.

As we notice in Table 57 the ratio between boys and girls is better. There are 61(35.2%) girls compared to 112(67.8%)boys. It seems that sex role stereotypes are stricter when dealing with adult men and women.

Table 57. The Appearance and Frequency of Males and Females in Social Studies Textbooks.

YEARS	1	2	3	4	5	6	5*	6*	TOTAL
Women in text	10	56	17	14	5	8	42	21	173
%	29.4	15.8	4.5	2.9	2.1	2.1	11.5	3.5	6.1
Men in text	24	299	364	461	230	359	323	584	2,644
%	70.6	84.2	95.5	97.1	97.9	97.9	88.5	96.5	93.9
Women in titles	-	2	-	-	-	-	-	-	2
%		11.1							2.2
Men in titles	-	16	27	10		14	14	7	88
%		88.9	100	100		100	100	100	97.8
Girls in text	3	30	8	7			11	2	61
%	50	40.5	50	29.2			42.3	8.3	35.2
Boys in text	3	44	8	17		3	15	22	112
%	50	59.5	50	70.8		100	57.7	91.7	64.8
Girls in titles	-	-	-	-	-	-	-	-	-
%									
Boys in titles	-	-	-	-	-	-	-	-	-
%									

1-4 Ourselves and Our World. 5 & 6 Geography. 5* & 6* Social and Political Behaviour
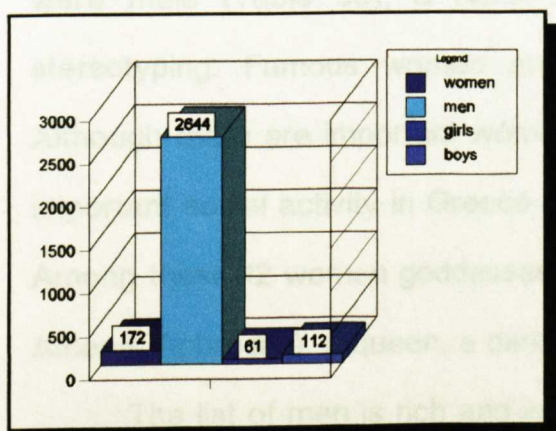
Figure 44. Appearance of Males and Females in Text.
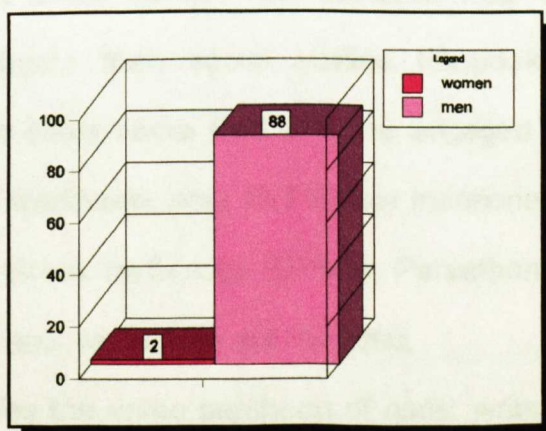
Figure 45. Appearance of Males and Females in Titles.

13.3.2. Appearance and Frequency of Named Characters

Anonymity characterizes women to a far greater extent than men. From 342 named characters only 64 are female characters (Table 58). Men seem to have the monopoly on being called by their name preceded by the title Mr, gaining in that way respect and importance.
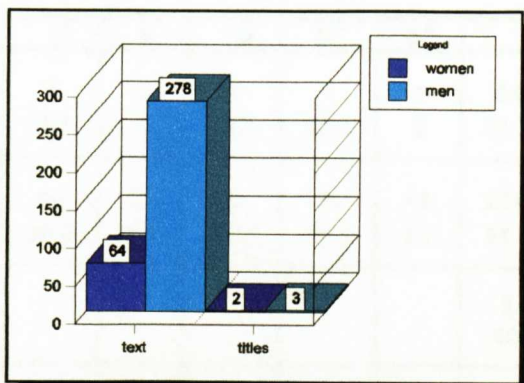
Figure 46. Named Characters in Text and Titles.

"Here she is, Annoula with her mother and her father, Captain Marino".   (2, 53)

A woman is referred to indefinitely or as a mother in comparison with the father for whom not only his name but also his profession is mentioned. The girl is called by the diminutive Annoula (little Ann), something that often happens when girls' names are referred to.

13.3.3. Appearance and Frequency of Famous Persons

Out 171 famous people cited in the context of the school books, 159 were male (Table 58), a result that could hardly be declared free of stereotyping. Famous women are absent from social studies textbooks. Although there are important women in every social field who are engaged in important social activity in Greece and worldwide, only 12(7%) are mentioned. Among these 12 women goddesses of Greek mythology (Dimitra, Persefhone, Athena, Aphrodite), a queen, a dancer, and two writers are included.

The list of men is rich and includes the entire pantheon of gods, writers and poets, philosophers, historians, heroes, scientists, explorers, kings and saints. The examples are taken not only from the Greek world but globally (Voltaire, Cousteau, Goethe, Gagarin, Columbus).

Table 58. The Appearance and Frequency of Males and Females in Social Studies Textbooks (Named Characters,Famous Persons, Principal Roles).

YEARS	1	2	3	4	5	6	5*	6*	T
Named characters in text W	6	33	4	7	3	3	7	1	64
%	66.7	33	18.2	13.5	4	18.7	38.9	2	18.7
Named characters in text M	3	67	18	45	73	13	11	48	278
%	33.3	67	82.8	86.5	96	81.11	61.1	98	81.3
Named characters in title W	-	2	-	-	-	-	-	-	2
%		40							40
Named characters in title M	-	3	-	-	-	-	-	-	3
%		60							60
Famous women in text	-	6	1	-	2	2	1	-	12
%		28.6	8.3		4	16.7	7.7		7
Famous men in text	-	15	11	34	48	10	12	29	159
%		71.4	91.7	100	96	83.3	92.3	100	93
Famous women in titles	-	-	-	-	-	-	-	-	-
%									
Famous men in titles	-	-	-	-	-	-	-	-	-
%									
Principal roles W	3	1	-	-	-	-	-	-	4
%	30	4.5							3.4
Principal roles M	7	21	4	15	11	-	20	34	112
%	70	95.5	100	100	100		100	100	96.6

13.3.4. Appearance and Frequency of Principal Roles

As shown in Table 58 (Total) there are 112 (96.6%) chapters icluding male principal roles and 4(3.4%) with female principal roles. The generosity shown by the books towards boys is indisputable. They offer them various models to identify with in a multitude of texts.
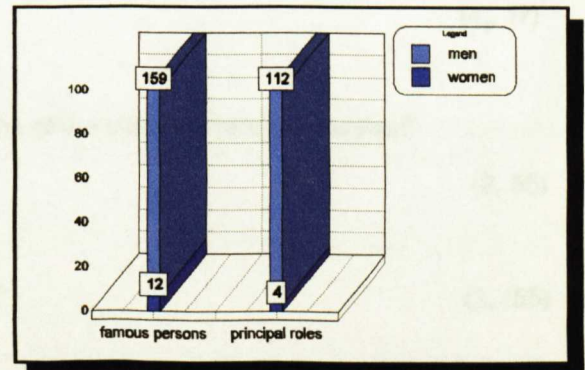
Figure 47. Famous Persons and Principal Roles in Text.

13.5. Social References

13.5.1. Marital and Family Status

The percentages referring to marital status are rather low. On the contrary, the frequency of references to family status is impressive. From Table 59 it can be seen that there are 67 references to females and 50 references to males. As in the mathematics textbooks, man is
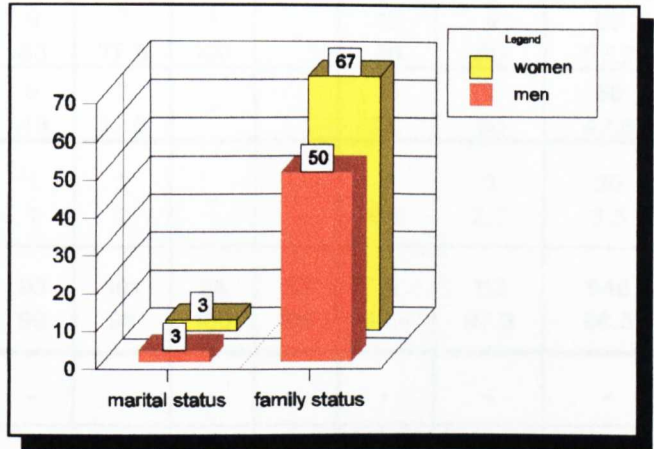
Figure 48. Social References: marital and family status.

now presented in a new role, that of the father who participates by guiding and educating the children, leaving mother with the responsibility of their physical care.

"Then, their father explained to them" $(4_3, 17)^*$

"Annoula's father showed them some photographs of the places where he travelled" (2, 55)

"Today Giannakis went for a walk with his father" (2, 155)

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* The numbers show the books from which the references were taken. The numbers from 1-4 refer to the books of Ourselves and Our World. The numbers 5 and 6 refer to the books for Geography and the numbers 5* and 6* refer to the books for Social and Political Behaviour. The subscript numbers refer to the numbers of the books in the series.

Table 59. Social References in Social Studies Studies Textbooks.

YEARS		1	2	3	4	5	6	5*	6*	TOTAL
Marital status	**W**	-	1	-	-	-	-	1	1	3
%			50					50	50	50
Marital status	**M**	-	1	-	-	-	-	1	1	3
%			50					50	50	50
Family status	**W**	4	29	9	7	1	-	13	4	67
%		50	58	60	77.8	100		50	50	57.2
Family status	**M**	4	21	6	2		-	13	4	50
%		50	42	40	22.2	-		50	50	42.8
Occupations in text **W**		-	9	1	2	-	-	5	3	20
%			8.8	1	2			6.6	2.7	3.5
Occupations in text **M**		17	94	95	101	24	32	71	112	546
%		100	91.2	99	98	100	100	93.4	97.3	96.5
Occupations in title **W** %		-	-	-	-	-	-	-	-	-
Occupations in title **M** %		-	4 100	-	-	-	-	-	1 100	5 100

W=women   **M**=men

13.5.2. Occupational Roles

The number of professional references to males is also impressive. Data from Table 59 indicate that there are 546 (96.5%) occupational references to men compared to only 20 (3.5%) for women. The textbooks often
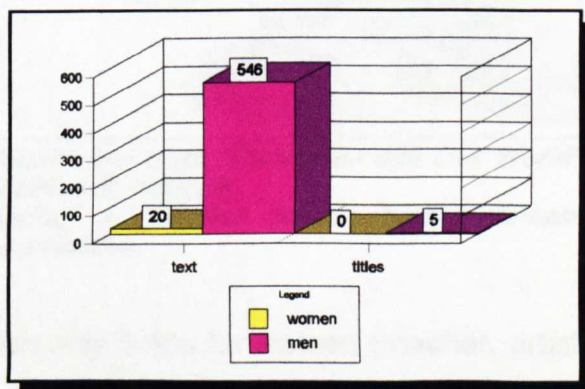
Figure 49. Social References: occupations

mention that the woman has a job outside the home, but they usually elaborate on her domestic role, not on her professional role.

The textbooks of Social and Political Behaviour make a serious attempt to appear modern and progressive.

For instance in the book used in the 6th year on page 10 it says:

Today a woman works outside the house. In the fields, in the factory, in the office, in her own enterprise; she follows courses of studies, she becomes a member of parliament, a minister and contributes equally with males. She is not obliged to learn all the things that a woman had to learn years ago. Her contemporary role is different".

In the 5th year book it is written:

"Nowadays the State has taken beneficial measures for the working woman, especially when she is also a mother: leave and payment of child-birth expenses, kindergarten provision for little children occasionally".   (5*, 92)

Illustration from "Ourselves and Our World" Textbook, 1989, 9.
Being a cleaner is a typical female occupation.

But on the page alongside (93) there is a list of 17 professions of which only 5 are for women (teacher, artist, salesperson, dentist, member of parliament).

The same books are self-contradictory when they present the working woman in a percentage of 3.5% (Table 59). The textbooks for Social and Political Behaviour make 8 professional references to women and 183 for men. On page 92 the Social and Political Behaviour textbook quotes an article from the Greek Constitution:

"Every working person regardless of sex or other discrimination, has the right of equal reward for service of equal worth that is rendered"

(Constitution of Greece, article 22, paragraph 1)

Nevertheless, in the entire book, only in two references (pages 163 and 164) is a woman shown to be compensated for her work. In many of the exercises following the lessons, there are lists of professions. In the

Illustration from "Ourselves and Our World" Textbook, 3rd Year, 1990, 165.
In the lesson with the title "Work" only male occupational roles are presented.
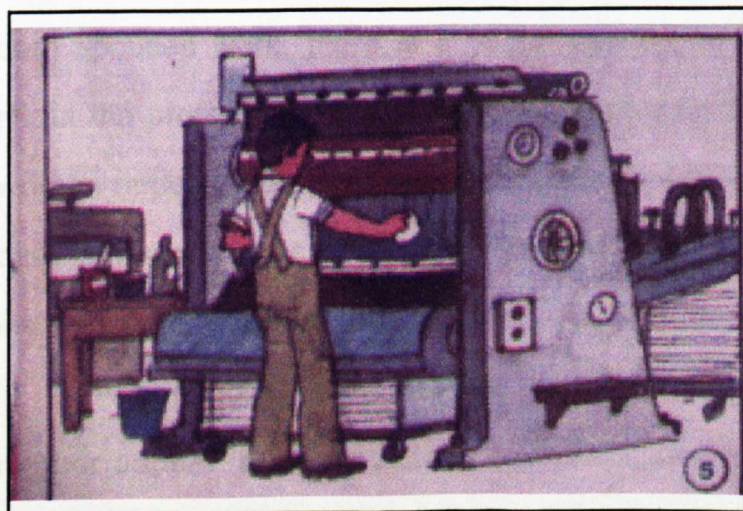
Illusttation from the same lesson. Another male occupational activity.Ourselves and Our World, 3rd Year, 1990, 165.

book used in the 2nd year, on page 22, there is a list of 5 professions, all for men. On page 55 another list of 5 professions appears of which only one is for women (seamstress). In the book used in the 3rd year on page 62 there are 11 professions quoted, all for men. In that way pupils vaguely conceive the notion that only men work in our society.

Table 60 includes all the occupations presented in the books. There are, in total 64 professions for men and 13 for women. Once again the list with the professions for men is extremely long. It includes the whole range of professions: low income, higher income, professions that require education and professions of high status and prestige. Among 13 professions for women 8 are typical for women (teacher, nurse, seamstress, housemaid, telephone operator, artist, salesperson, worker) and naturally there are professions of low prestige and status, avoiding in that way the possibility of reducing the father's and husband's prestige by depicting a woman with a profession more prestigious and with a greater financial reward than his.

Not only are the occupations for women limited but they are also never described in detail. There are no detailed descriptions of women's professions as opposed to those for men (for example, the occupations of traffic policeman, meteorologist, astronaut). When a passage mentions the fact that both spouses work, there is a vague description with no definite indications about the professions. Is it a coincidence only or does the image of a working woman oppose the stereotype of Greek society? In Greece tradition says that only men work and cases where their wives also work, demonstrate that they are unable to *"support"* their families.

Accordingly, in the textbooks, rarely does the image of a working mother appear since it opposes the stereotype, which requires the mother to be close to her children. Therefore, the idea is created for children that the combination of father and working man is something natural, but the image of mother and working woman is something incompatible.

Table 60. List of Occupations assigned to Males in Social Science Books

	YEARS	1	2	3	4	5	6	5*	6*	TOTAL
1	Farmer	-	11	20	9	2	9	5	3	59
2	Mayor/Prefect/Elder	-	7	8	8	-	2	2	14	41
3	Primeminister/Member of parliament/Minister	-	1	-	10	-	-	2	26	39
4	King/Emperor/Sultan	-	3	2	3	3	1	-	19	31
5	Worker	1	4	9	3	-	3	5	4	29
6	Merchant	-	1	5	6	1	4	2	6	25
7	Clerk/Salesperson	-	3	2	8	-	1	5	3	22
8	Teacher	-	2	4	7	-	-	4	3	20
9	Technician	-	3	1	11	-	-	4	1	20
10	Doctor	2	4	5	4	-	-	4	1	20
11	Shepherd	-	6	3	3	-	2	2	1	17
12	Captain/Sailor	1	5	3	2	2	-	-	-	13
13	Scientist	-	1	-	5	2	-	2	-	10
14	Traffic Warden/Policeman	1	2	1	1	-	-	2	1	8
15	Postman	1	2	3	1	-	-	-	-	7
16	Pilot	-	4	1	1	-	-	-	-	6
17	Barber	-	1	-	1	-	-	3	1	6
18	Artist/Musician/Singer	3	-	-	1	-	-	1	-	5
19	Architect/Engineer	-	2	1	-	-	-	2	-	5
20	Hunter	-	-	1	-	1	3	-	-	5
21	Poet/Writer	-	-	3	-	-	-	-	2	5
22	Grocer/Greengrocer	1	-	3	-	-	-	-	-	4
23	Baker	-	-	-	1	-	-	3	-	4
24	Forest guard	-	1	2	1	-	-	-	-	4
25	Carpenter	-	1	3	-	-	-	-	-	4
26	Referee	-	-	1	-	-	-	2	1	4
27	Meteorologist	-	-	1	2	-	1	-	-	4
28	Astronaut	-	-	-	-	4	-	-	-	4
29	Slave	-	-	-	-	-	4	-	-	4
30	Archbishop	-	-	1	1	1	-	-	-	3
31	Fisherman	-	-	1	1	-	-	1	-	3
32	Explorer	-	-	-	-	3	-	-	-	3
33	Street Cleaner	1	-	-	-	-	-	1	-	2
34	Painter/Sculptor	-	2	-	-	-	-	-	-	2
35	Agronomist	-	2	-	-	-	-	-	-	2
36	Railway employee	-	2	-	-	-	-	-	-	2
37	Inventor	-	2	-	-	-	-	-	-	2
38	Tax collector	-	1	-	-	-	-	-	1	2
39	Thief	-	1	-	-	-	-	-	1	2
40	Woodcutter	-	1	1	-	-	-	-	-	2
41	Cook	-	1	1	-	-	-	-	-	2
42	Athlete	-	1	-	1	-	-	-	-	2
43	Tailor	-	-	1	-	-	-	1	-	2
44	Journalist	-	-	1	1	-	-	-	-	2
45	Philosopher	-	-	1	1	-	-	-	-	2
46	Blacksmith	-	-	2	-	-	-	-	-	2
47	Priest/monk	-	-	-	-	1	1	-	-	2
48	Doorman	1	-	-	-	-	-	-	-	1
49	Driver	1	-	-	-	-	-	-	-	1

50	Chemist	1	-	-	-	-	-	-	-	1
51	Nurse	1	-	-	-	-	-	-	-	1
52	Acrobat	1	-	-	-	-	-	-	-	1
53	Collector	1	-	-	-	-	-	-	-	1
54	Cashier	-	1	-	-	-	-	-	-	1
54	Bank employee	-	1	-	-	-	-	-	-	1
55	Messenger	-	1	-	-	-	-	-	-	1
56	Guard	-	1	-	-	-	-	-	-	1
57	Headteacher	-	1	-	-	-	-	-	-	1
58	Butcher	-	-	1	-	-	-	-	-	1
59	Mineralogist	-	-	-	1	-	-	-	-	1
60	Aircraft/builder	-	-	-	1	-	-	-	-	1
61	Computer manipulator	-	-	-	1	-	-	-	-	1
62	Miller	-	-	-	1	-	-	-	-	1
63	Slave trader	-	-	-	-	-	1	-	-	1
64	Shoemaker	-	-	-	-	-	-	1	-	1

Table 61. List of Occupations in Social Science Textbooks Assigned to Females

	Grades	1	2	3	4	5	6	5*	6*	TOTAL
1	Teacher	-	3	-	-	-	-	1	-	4
2	Nurse	-	2	-	-	-	-	-	-	2
3	Worker	-	1	-	1	-	-	-	-	2
4	Member of parliament	-	-	-	-	-	-	1	1	2
5	Headteacher	-	1	-	-	-	-	-	-	1
6	Seamstress	-	1	-	-	-	-	-	-	1
7	Maid	-	-	1	-	-	-	-	-	1
8	Telephoneoperator	-	-	1	-	-	-	-	-	1
9	Artist	-	-	-	-	-	-	1	-	1
10	Dentist	-	-	-	-	-	-	1	-	1
11	Salesperson	-	-	-	-	-	-	1	-	1
12	Minister	-	-	-	-	-	-	-	1	1
13	Princess	-	-	-	-	-	-	-	1	1

13.4.3. Type of Environment

Consequently, men dominate as Table 62 (Type of Environment) indicates, it is basically men who are presented in the field of work. There are 132 (95.7%) references to men in comparison to 6 (4.3%) to women. In addition there are 71 (94.7%) references to males
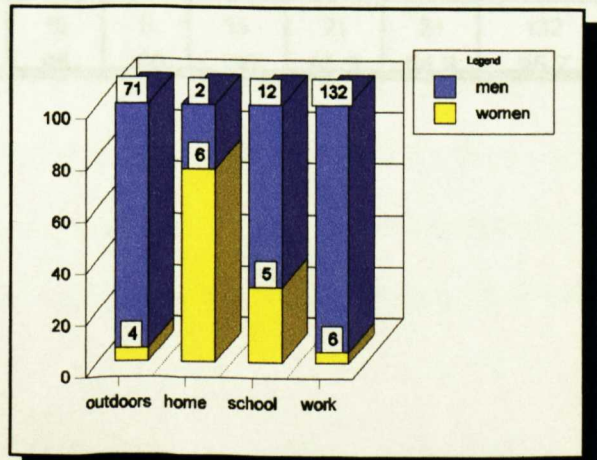
Figure 50. Social References: type of environment.

depicted outdoors compared to 4 (5.3%) to females. The representation of woman in the working field as well as out of the house is extremely limited. Men seem to be generally superior to women. Even at school there are 12 (70.6%) boys presented compared to 5 (29.4%) girls.

"Only boys went to school" $(4_2, 113)$

While men are frequently portrayed as receiving formal education or seeking knowledge, girls are seldom shown involved in those activities.

Table 62. Social References in Social Studies Textbooks. Type of Environment

YEARS	1	2	3	4	5	6	5*	6 *	TOTAL
Women outdoors	1	-	-	1	-	2	-	-	4
%	33.3			12.5		22.2			5.3
Men outdoors	2	7	4	7	13	7	16	15	71
%	66.7	100	100	87.5	100	77.8	100	100	94.7
Women at home	1	1	-	-	-	1	2	1	6
%	50	50				100	100	100	75
Men at home	1	1	-	-	-	-	-	-	2
%	50	50							25
Women at school	4	-	-	1	-	-	-	-	5
%	57.1			50					29.4
Boys at school	3	3	-	1	-	-	2	3	12
%	42.9	100		50			100	100	70.6
Girls at work	-	3	-	1	-	-	1	1	6
%		12		5			4.5	3.1	4.3
Men at work	5	22	14	19	5	15	21	31	132
%	100	88	100	95	100	100	95.5	96.9	95.7

Illustration from 3rd year Textbook "Ourselves and Our World", 1990, 165.

Illustration from 3rd Year Textbook "Ourselves and Our World", 1990, 165.

13.5. Linguistic Content

13.5.1. Number of Pronouns

The inequality of the two sexes is present even in the language, often not obviously perceived but always decisive for the formation of children's attitudes regarding the sexes.

The language and images that writers use in social studies textbooks are consistently male dominated. When an individual is presented as an actor, that person is male.

The data in Table 63 continue the trend of having more males than females. As it can be seen, the number of pronouns assigned to males is 1,076 (92.7%) while pronouns assigned to females are 85 (7.3%). In fact, when choosing between the pronoun *'he'* and *'she'*, accuracy, in fact, demands the use of the pronoun *'she'* since statistically there are more women in Greece than men.

Table 63. Linguistic Content in Social Studies Textbooks

YEARS	1	2	3	4	5	6	5*	6*	T
Number of pronouns assigned to females %	4 12.5	44 17	7 4.9	1 1.4	-		-	13 3.7	85 7.3
Number of pronouns assigned to males %	28 87.5	215 83	135 95.1	70 98.6	16 100	48 100	222 93.3	341 96.3	1,076 92.7
Number of attributes assigned to females %	1 50	4 100	-	3 20	-	-	1 3.4	2 3.5	11 10.7
Number of attributes assigned to males %	1 50	-	7 100	15 80	10 100	15 100	28 96.6	55 96.5	92 89.3

Man's predominance is such that his sex is identified with the word άνθρωπος (anthropos=human being). As we have already seen in the analysis of textbooks, the word άνθρωπος (anthropos) is used to indicate the male sex. In contrast to English, there are two terms in Greek
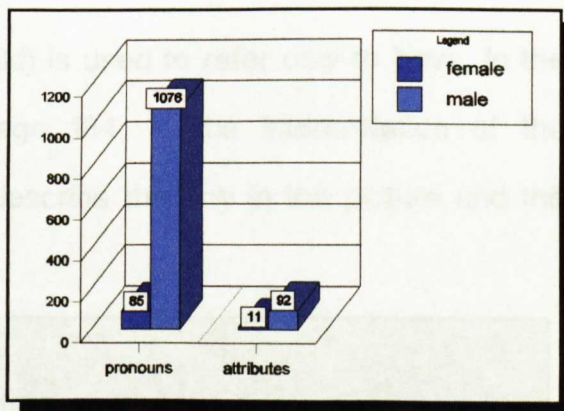
Figure 51. Linguistic Content.

άνδρας (andras=male) and γυναίκα (gyneka=female), referring exclusively to the sexes separately. The word άνθρωπος (anthropos) is used to include both sexes. Although there are two different words to refer either to man or human, in most phrases and with very few exceptions *anthropos* is used to mean *andras*. Therefore, when a title contains the word *anthropos* it is self evident that it refers to man. This fact is supported by the accompanying illustration which almost always depicts men. '*Anthropos* makes progress', '*Anthropos* learns to write', '*Anthropos* has makes discoveries' are just few examples.

Subsconsciously, *anthropos* is identified with man. Thus, pupils learn to accept this identification as a norm. The word *'anthropos'* is never used to indicate women.
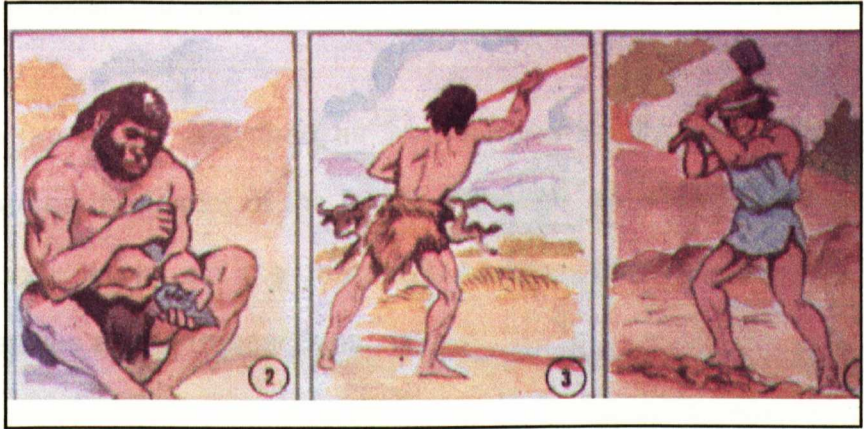
Illustration from 4rd Year Textbook "Ourselves and Our World", 1991, 55.
The subtitles under the illustrations are: Athropos constructor of the first tools, Anthropos hunter, Anthropos cultivator.

Similarly the word παιδί (pedi=child) is used to refer only to boys. In the textbook used in the 3rd year on page 184, in the interpretation of the illustrations, the word *'pedi'* is used to describe the boy in the picture and the word girl to describe the girl in the picture. In the 5th year textbook, page 13 (see illustration), the caption mentions: "pedia (children) want to play football" and refers exclusively to boys as is shown in the picture.

Illustration from 5th Year Textbook "Social and Political Behaviour", 1993, 13.

Women as the weaker sex are classified with old men and children.

"But also all the people; women, old men and children helped as much as they could"   (2, 197)

and other times with slaves

The members of a family are described as 'Mr Andreas' family', thus clearly distinguishing the man as the leader of the family. Although, as shown in the 1st photograph, everybody works on the farm, Mr Andreas has the economic management and handles all the transactions.

"Mr. Andreas pays for food, clothes, electricity, water and all the other things that his family needs. These are his expenses. How does he manage them? Where does he find the money?"

(3, 164)

Illustration from 3rd Year Textbook "Ourselves and Our World", 1990, 164.
Mr Andreas' family. Mr Andreas is the head of the family.

The use of a simple coordinate gives another dimension to the meaning of a phrase and obviously indicates a subtle form of sexism:

"Some of them participate **and** women"

(5, 61)

Writers, pressed by equal opportunities criteria in the formulation of the content of the textbooks, try to present a

Illustration from "3rd Year Textbook "Ourselves and Our World", 1990, 164.
Mr Andreas' Family work on the farm.

progressive view and to portray women as equal to men, but the language betrays them, by revealing their deeper attitudes and beliefs and undermining

their so-called 'progressiveness'.

13.5.1. Number of Attributes

There is also an imbalance in the number of attributes referring to men and women. Table 63 show that only 11 attributes arre assigned to females compared 92 assigned to males. All 7 attributes characterize the virtues of the female sex: "a good girl" (1, 146), "good mothers and housewives" (4, 113). The attribute "good" is characteristically associated with women. According to Green, Hebron and Woodward (1990, 119).

"the stereotype of the 'good mother' represents her as born with a particular set of 'natural' characteristics which fit her for such a role...the linked stereotype of the 'good wife' is constituted by similar characteristics (self-sacrifice, obedience and cleanliness)".

The other attributes assigned to females are: "dependent" (5*, 32), "middle-aged" (2,117), "single" (6*, 63), "pretty and charming"(2, 71).

So the girl learns that she should be pretty, charming, good and dependent in order to avoid being a single middle-aged woman. On the contrary, for men, as shown in Table 64 (List of Attributes) a multitude of both positive and negative traits exists.

The inequality in words and generally in the language, is a product of tradition and thus by its presence forms children's ideas regarding the sexes quite subconsciously and imperceptibly, incessantly influencing and shaping their beliefs and values. Language imprints the ideas which dominate in society, but at the same time, through their expression also has a great impact.

Table 64. List of Attributes Assigned to Males and Females

M A S C U L I N E			
SOCIAL		**INTELLECTUAL**	**EMOTIONAL**
Ambitious	Hostile	Clever	Happy
Anxious	Hurried	Educated	Joyful
Avaricious	Kind	Wise	
Benefactor	Leader		
Conqueror	Mad		
Correct	Mature		
Courageous	Oppressive		
Dangerous	Patriotic		
Daring	Powerful		
Experienced	Proud		
Famous	Responsible		
Fighter	Specialist		
Free	Tough		
Friendly	Tyrranical		
Founder	Wild		
Grasping	Wilful		
Great	Winner		
F E M I N I N E			
Beautiful	Dependent		Frightened
Sweet	Good		
Unmarried	Pretty		

13.6. Activities

Not surpringly, males predominate in activities. The only activities where women have the leading role are in domestic tasks and child care activities.

Table 65. Appearance of Males and Females in Activities in Social Studies Textbooks

YEARS	1	2	3	4	5	6	5*	6*	T
Domestic tasks for women	-	2	1	2	-	1	1	1	8
Domestic tasks for men	1	-	-	1	-	-	1	1	4
Child care activities for women	-	1	1	-	-	-	1	1	4
Child care activities for men	-	1	-	-	-	-	1	-	2
Leisure activities for women. Active:	-	-	-	-	1	-	-	-	1
Passive:	2	-	-	-	-	-	-	-	2
Leisure activities for men. Active:	2	-	1	5	4	2	10	4	28
Passive:	2	-	-	1	-	-	-	-	3
Political and social activities for women	-	-	1	-	-	-	4	6	11
Political and social activities for men	1	3	10	17	-	3	19	45	98

In the Social and Political Behaviour Textbook used in the 6th year, activities for men contrast with those of women. So "mother cooks, kneads, knits, weaves and sews" while "father ensures food and shelter, builds and repairs tools" (6*,

10). Woman takes care of children (2, 19; 3, 136), but the father goes for a walk with his son (2, 155) and of course it is not accidental that father goes for a walk with his son and not with his daughter.

Figure 52. Appearance of Men and Women in Various Activities.

Even early childhood activities are divided into activities for males and females.

"The boy mends his toy-car"   (2, 171)

In order to prevent doubts about the globalism of this division of activities of the two sexes, there are also examples presented from Laplanders and Pygmies. In Lapland for instance,

Illustration from 2nd Year Textbook "Ourselves and Our World". 1992, 171.

"Men hunt reindeers and other animals with the javelin, they fish...women prepare clothes and with their children collect vegetables in the tundra-small fruits and birds-eggs".   (6, 34)

This also happens with the Pygmies:

"Men hunt birds, monkeys, wild boars, antelopes and other animals with bows and arrows, and their home - made traps. Women and children search for fruits, roots, leaves, mushrooms, insects and honey".   (6, 41)

Writers seem to ignore any alternative society model. Indeed the research of Margaret Mead has showed (as we have seen in chapter 1) that there are races where traits exist quite undifferentiated by sex or even some races where the stereotypes found in modern societies, are reversed (Mead, 1950; 1963; 1977).

In the textbooks analysed however, even in primitive societies the strict division of the two sexes' activities seems to prevail. In a passage describing life in primitive

Illustration from 3rd Year Textbook "Ourselves and Our World", 1990, 191.

societies men hunt, fish, and make guns, while woman is presented in the role of mother and housewife. Women are portrayed holding a baby in their arms, sewing clothes or collecting fruits from trees. However, Fester et al. contend that the results of research done by scientists in different fields (ethology, paleo-speleology, paleo-linguistics, paleo-anthropology, psychology) converge in the conclusion that in the longest period of history, people lived in societies ruled by women (gynecocracy) for a million years whereas societies ruled by men are a phenomenon of the last few thousands of years (Fester et al., 1984).

As we have also seen in the analysis of other textbooks, leisure activities exclusively concern males. Women are not given the right to entertain themselves or do not have the time required for their personal amusement. Table 65 indicates that only 3 leisure activities are associated with women and 31 with men. Men go climbing (5, 23) go hunting (4,37), play football (5*, 13), travel (5*,7), drive, (5*, 111) bike, (5*, 111) and visit friends(5*, 57).

In the textbooks on Social and Political Behaviour, men are presented in a series of social and political activities, since many lessons deal with state

government, municipal administration, elections, the function of parliament; all exclusively devoted to men. Table 65 indicates that 98 political and social activities are associated with men and only 11 with women. One of the few social and political activities associated with women is their participation in the feminist movement, one positive element presented in textbooks.

"Through constant struggles feminists managed to attain equal rights with men".

(5*, 119)

Men are involved in every social and political activity. They go on strike (5*, 55) they participate in demonstrations (4,101) and rebellions(6*, 23) in political parties (6*, 82), organizations, associations and corporations (6*, 30) they submit tax returns (6*, 62) and pay taxes (6*63) go to courts (6*, 36) insure themselves (6*, 40) and take part in the government (6*, 26). On the other hand women vote and have the right of candidature (5*, 69) but they are seldom elected since the mayor, the prime minister and the president is always a man according to the textbooks.

13.7. Behavioural Traits

13.7.1. Social Behavioural Traits

Data from Table 66 indicate that masculine social behavioural traits exceed feminine social behavioural traits.

Men are presented as cruel (Table 66, Total 14).

"In slave-markets rich men were buying and selling slaves whom they treated with great cruelty".

(4$_2$, 83)

"Most of the Indians (of America) were exterminated by the first colonists". (6$_1$, 71)

"Father used to say that they should find the arsonist and punish him harshly". (2, 199)

In contrast, the same passage presents the sensitivity of the female soul through the words of a girl:

"I was thinking of the poor animals; did they manage to escape or were they burnt in the forest?"

Table 66. Behavioural Traits in Social Science Textbooks. Social

Masculine	1		2		3		4		5		6		5*		6*		T	
	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M
Cooperative						3		1								4		19
Cruel				2				1		1		4		1		5		14
Brave-Courageous				4		4		1				2				2		13
Antisocial								1		4		3		2		3		13
Conqueror				1				2		3		5				1		12
Patriotic				2				2						2		4		10
Adventurous				1						5								6
Inventive				1		5												6
Ambitious				1												2		3
Friend/MutualHelp				2												1		3
Independent		1												2				3
Aggressive		1																1
TOTAL		2		14		9		7		13		14		7		18		83
Feminine																		
Anxious														1				1
Religious														1				1
Dependent												1						1
Emotional				2														2
TOTAL				2								1		2				5

Thus, men behave with courage, grit and bravery (Table 66, Total 13).

"Soldiers fought bravely".   (2,197)

"Daedalus did not lose his courage".   (2,73)

Another masculine behavioural trait, patriotism, finds its source in male models. Although many women fought and died heroically for Greece, their contribution is totally omitted.

Legend:
- masculine traits in men
- masculine traits in women
- feminine traits in men
- feminine traits in women

Figure 53. Social Behavioural Traits according to Sex and Levels.

"We honour him because he gave his life for the country".   (2, 47)

"Young men from the village, with other Greeks, fought for freedom".   (2, 194)

Another masculine trait is the cooperation and mutual help between men (Table 66, Total 3 Mutual Help).

"The boy found it hard to solve the problem by himself, so two classmates came and with their cooperation they finally solved it". (3,33)

"The driver tried without any result; two passers-by helped him and his car started". (3,3)

"The Greeks, in the face of the common enemy, united their forces". (4,90)

Men are portrayed as winners and conquerors.

"The King of Macedonia, Alexander, organized a great expedition to Asia, devastated the Persian country and reached India." (4,90)

Men are noted as inventors.

"Daedalus and Icarus are considered to be the first pilots". (2,73)

"Men made planes, rockets and spaceships". (3,91)

"Men made tools and guns, tamed animals and learned to cultivate the earth". (3,192)

Men are adventurous.

"Icarus kept on going higher and higher; he had forgotten the words of his father". (2, 73)

"Columbus set out to find a new route to India". (5,10)

Men are presented not only with positive but also with negative characteristics. So men are portrayed as ambitious thus provoking wars induced by their personal ambition.

"The cases where ambitious, unjust or insane national leaders, lead their people into this kind of war are uncountable". (6*, 102)

"In order to be praised, Mussolini declared war against Greece". (2, 197)

Men deal with the slave-trade.

"Traders carry Negroes from Africa who are used as slaves". (5,14)

They are presented as forest fire-raisers (6*, 47; 2, 199). They are poachers (4₂, 37). They are avaricious.

"Midas was the richest king in the world, but he wasn't pleased with his wealth and he wanted more".   (2_2,74)

13.7.2. Intellectual Behavioural Traits

Regarding intellectual behavioural traits, as shown in Table 67, they exclusively concern men. Men are referred to as knowledgeable.

"As you can see the place is mountainous, said Petros".   (2,51)

"Giannakis narrated the history of the town, as he had heard it from the elders."   (2, 195)

Men are questioning.

"Giannakis was wondering how men managed to build walls in the sea".   (2, 54)

"Giorgios was wondering why wars take place and so many lives are lost".   (6, 101)

Table 67. Behavioural Traits in Social Science Textbooks
Intellectual

Masculine	1		2		3		4		5		6		5*		6*		Total	
	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M
ProblemSolving Ability				1		2		3		1		2		1				10
Wise				1				1						7				9
Knowledgeable				2		1		3				2				1		8
Creative								6										6
Questioning				1												2		3

Men have the ability to solve with their minds any problem that arises.

"He found a way to leave. He would fly above the sea like a bird".   (2, 73)

They are creative.

"The grandeur of the river was the theme of many musical works of great composers". (5,55)

"Man created and continues to create civilization".   (6, 48)

They are wise

"A French philosopher, Voltaire, said".   (5, 108)

13.7.3. Emotional Behavioural traits

The generosity shown in favour of boys by books is undeniable. The schoolbooks analysed, offer boys many models to identify with in a variety of stories, without any of the limitations that exist for the female sex, in order to acquire a positive attitude about themselves.

On the other hand, girls are mostly presented from an emotional viewpoint.

"She loved flowers. Now and then she made pretty bunches of flowers and she offered them to her father" $(2_2, 74)$

"She runs to embrace him". $(2_2, 75)$

"What bothers you my father, his daughter said, scared". $(2_2, 75)$

Table 68. Behavioural Traits in Social Studies Textbooks
Emotional

Masculine	1		2		3		4		5		6		5*		6*		Total	
	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M
Fearless				1														1
Fearful			1														1	
Joy			1														1	
Pity			1														1	

13.8. Conclusions

As with the analysis of the other schoolbooks, the analysis of textbooks regarding social studies also showed a world dominated by the male sex. Although a major purpose of social studies is to direct attention to contemporary social issues and problems, social studies textbooks tell children about a nation created, maintained, and led by men.

One would expect these books to be more progressive since they deal with social subjects. It is supposed that they should also attempt to make pupils be aware of and understand their responsibility in the process of improving

social life. Nevertheless, although there is a conscientious effort by writers to convey positive messages in favour of women, of sex equality, equal reward and equal treatment of the two sexes, these new images of women are referred to briefly and not discussed and as a result the information is lost in the midst of all the other messages contained in the textbooks.

Through these books, up-to-date subjects are touched on and a comparison is made between the old and new constitution, which is really one of the most progressive and modern constitutions in Greece. However, the analysis of textbooks indicates that the reference to the equality of the two sexes is rather superficial and does not correspond to the deeper belief of the writers. Social studies textbooks not only portray sex roles in the traditional manner, but females are less often included and when they are present, they assume fewer prestigious roles. Consequently, the opportunity to promote the equality of the two sexes, is lost. .

Furthermore, one would also expect other problems that concern the modern Greek family and greatly influence children, such as divorce, one-parent families, adoption, and unmarried parents, to be dealt with. On the contrary, only embellished images of the family are presented.

"A couple is united by love and mutual attraction. From this union children are born. The birth of children brings happiness into the home. Without children the world would stop existing".

(5*, 25)

The family institution is presented through the strict moral stereotypes of marriage.

"A family is created when a man and a woman decide to live together as a legal couple". (5*, 23)

However, these books offer sensitized teachers the opportunity for fruitful conversations with pupils and this can be considered as one of the positive elements of the books. Books in use nowadays should diverge from the old ideology. They should present and explain to pupils the present social reality by providing representations that would question stereotyped roles. Furthermore, the historic passages or those that investigate history or social anthropology and investigate the initial forms of social structure, must question the man-centred ideology in the relationship between the two sexes and seek models inspired by modern anthropological and historical approaches, where sex inequality is not considered as a natural phenomenon.

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CHAPTER 14

CONCLUSIONS

One of the basic factors considered to contribute to the inferior position of the female sex, is the perpetuation of the traditional thinking about gender roles, the associated professions and the overall characteristics of the sexes. These beliefs underlie socialisation from a very early age. Sex role socialisation begins - as we have seen - in the family and continues at school. School with its organisational framework, teacher-pupil relations, the curriculum and also the hidden curriculum, comes usually to reinforce what has already started inside the family. At the same time, other factors such as the mass media, peer groups and sexist use of language also play their part in the process of socialisation.

Based on theoretical and research data, we have seen that books play an important role in the configuration of stereotype ideas about sex roles. According to the most basic socialisation theories, anything that appears in children's literature relative to the two sexes, contributes essentially to children's sex role socialisation. More specifically, it defines the ideas formed by children regarding what is considered as socially acceptable and appropriate for the two sexes. It also encourages children to imitate everything and anything shown to be done and performed by characters of the same sex as themselves.

Although the school textbooks used for the research are the most recent in Greece, changes take place at a slow rate and the books analysed do not seem to have overcome past problems. Despite the General Secretariat of Equality having made its own proposals the representation and the presentation of both sexes is performed in an unacceptable manner.

From the overall analysis of Greek school textbooks there derives some interesting conclusions. The content analysis of textbooks shows that in these books the principles of equality of the sexes are not applied. The Greek State has not produced textbooks conducive to its promise of sex equality. The results from this research are similar to what we have seen in the review of other literature. Females play a minor role in the textbooks. As it is shown in Table 69 the appearance of women accounts for 6.4% (1,538) in the books, while men appear much more frequently 93.6%(22,324) (a ratio of 1:14.5). The numerical superiority of men is overwhelming whilst women hardly appear at all. The appearance of girls is comparatively better (35.9%) since the stereotypes seem to be more rigid for adults.

Table 69. The Appearance and Frequency of Males and Females

SUBJECTS	H	R	M	S	SS	TOTAL
Women in text	630	625	94	16	173	1538
%	6.36	6.04	16.5	6.8	6.1	6.4
Men in text	9,267	9,718	477	218	2,644	22,324
%	93.63	93.95	83.5	93.2	93.9	93.6
Women in titles	28	29	-	-	2	59
%	10.03	9.76			2.2	8.9
Men in titles	251	268	-	-	88	607
%	89.96	90.23			97.8	91.1
Girls in text	53	106	421	2	61	643
%	32.51	39.84	36	13.3	35.2	35.9
Boys in text	110	160	750	13	112	1,145
%	67.48	60.15	64	86.7	64.8	64.1
Girls in titles	-	1	-		-	1
%		33.33				33.33
Boys in titles	-	2			-	2
%		66.66				66.66

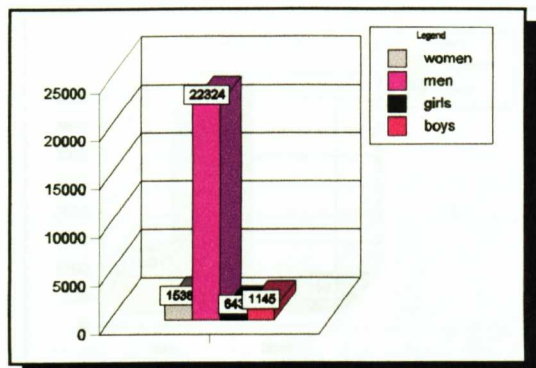H:History, R: Religious, M:Mathematics, S:Science, SS:Social Science Textbooks

Figure 54. Appearance and Frequency of
Males and Females in Text.
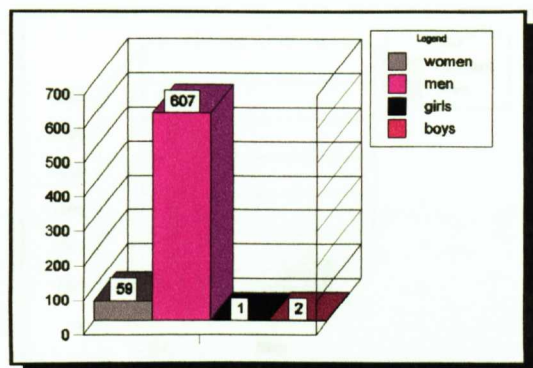
Figure 55. Appearance and Frequency of
Males and Females in Ttles.

Only few strong female personalities are depicted who could inspire female pupils and serve them as a role model and help both boys and girls to gain faith in female quality. In the table of famous persons we can see that 215(7.6%) women and 2,603(92.4%) men are presented in the books. The ratio of female to male famous persons is 1:12. In addition, in the textbooks there are very few poems, extracts or contributions by famous female poets or writers.

Table 70. The Appearance and Frequency of Males and Females (Named
Characters, Famous Persons, Principal Roles)

SUBJECTS	H	R	M	S	SS	TOTAL
Named characters in text **W**	211	151	232	1	64	659
%	9.99	14.1	37.4	3.8	18.7	15.8
Named characters in text **M**	1900	920	387	26	278	3511
%	90.01	85.9	62.6	96.2	81.3	84.2
Named characters in title **W**	14	7	-	-	2	23
%	12.61	5.6			40	9.5
Named characters in title **M**	97	118	-	-	3	218
%	87.39	94.4			60	90.5
Famous women in text	133	69	-	1	12	215
%	7.93	7.31		4.5	7	7.6
Famous men in text	1545	874	4	21	159	2603
%	92.07	92.68	100	95.5	93	92.4
Famous women : title	11	9	-	-	-	20
%	11	5.3				5.8
Famous men : title	164	164	-	-	-	328
%	89	94.7				94.2
Principal roles **W**	23	35	-	-	4	62
%	5.37	8.9			3.4	6.4
Principal roles **M** %	405	386	-	-	112	903
	94.63	91.1			96.6	93.6
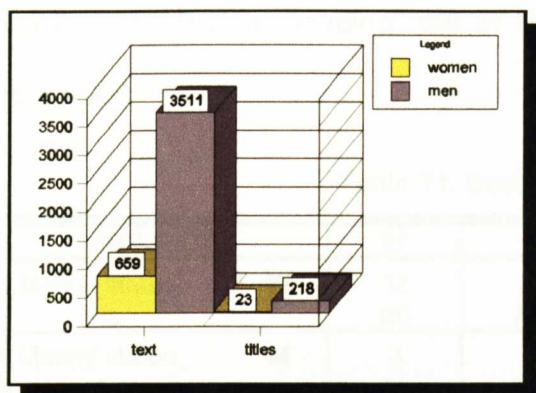
Figure 56. Named Characters in Text and Titles.
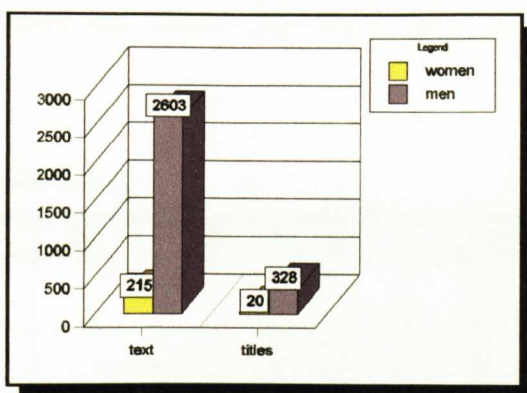
Figure 57. Famous Persons in Text and Titles.

Females play a central part in the textbooks less often than males . As predicted, there are far fewer female principal roles represented in the textbooks than male. Examining the principal roles, women are portrayed at a percentage of 6.4%(62) and men at 93.6%(903).
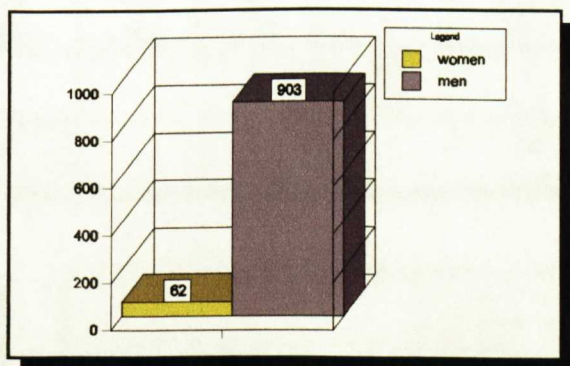
Figure 58. Principal Roles.

The marital and family status of individuals is more accentuated when women are concerned. In 34(72.3%) cases woman is referred to as "wife" while man is referred to as "husband" only in 13(27.6%) cases. The frequency with which man is presented as father 223 times (43.8%) is also impressive. Even though the theoretical data from Chapter 3 suggests the absence of the "father" figure in school textbooks, in this analysis man has a vivid presence in this role. Here this factor emphasizes even more completely and positively the image of man as it is presented through the textbooks. Man's role extends to the role of father, who is responsible for the pedagogical aspects of child

rearing and has a leading role in children's education and particularly boys' education.

Table 71. Social References

SUBJECTS		H	R	M	S	SS	TOTAL
Marital status	W	12	19	-	-	3	34
%		80	73.1			50	72.3
Marital status	M	3	7	-	-	3	13
%		20	26.9			50	27.6
Family status	W	67	98	52	2	67	286
%		69.1	54.4	46.4	66.7	57.2	56.2
Family status	M	30	82	60	1	50	223
%		30.9	45.6	53.6	33.3	42.8	43.8
Occupations in text	W	42	16	7	7	546	618
%		3.1	3.1	5	9.4	96.5	23.2
Occupations in text	M	1,339	502	135	67	-	2,043
%		96.9	96.9	95	90.6		76.7
Occupations in title	W	2	-	-		5	7
%		5.3				100	8.4
Occupations in title	M	36	40	-			76
%		94.7	100				91.6

W=women M=men

Figure 59. Social References; Marital and family status.

Figure 60. Social References: Occupations.

Fewer professions are associated with females in the textbooks. The percentages in Table 71 show 618 professional references for women (23.2%) compared to 2,043 for men (76.7%).
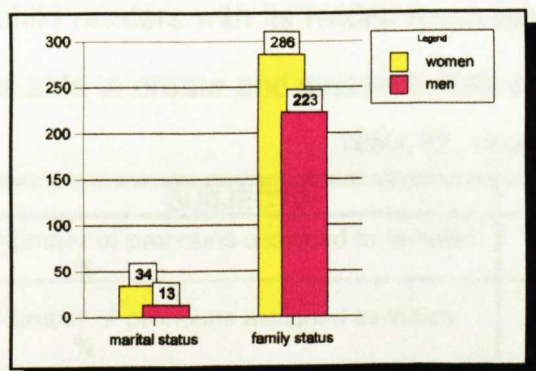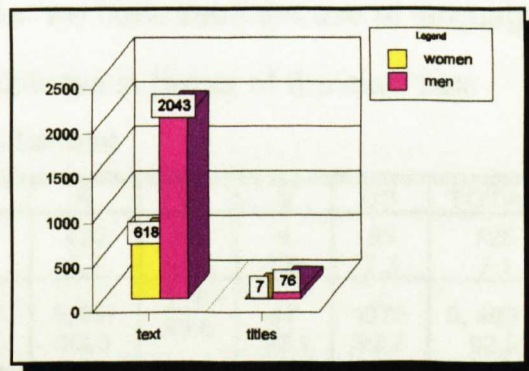
The professional world is a man's world. In fact, the books mirror a social reality that is decades old. They are based on outdated concepts which reinforce socialisation processes that are harmful for our society.

Men are portrayed in a much wider variety of occupations than women are. For men there are numerous professions and a wide range of choices. For women, on the other hand, the choices are unfortunately limited. If they are not favoured by nature to be born as queens and princesses, they have to become teachers, nurses or housemaids. Males have a monopoly on prestigious and highly skilled professions. Fathers are defined by their work, mothers by their domestic and child care functions.

Language plays a significant role in the course of socialisation and in the shaping of personality. The authors of the schoolbooks use language in such a way that it is an indirect influence on the children's beliefs and affects the child readers with its hidden messages. As we have seen the use of language is able to create and sustain beliefs and attitudes in favour of the male sex.

Table 72. Linguistic Content

SUBJECTS	H	R	M	S	SS	TOTAL
Number of pronouns assigned to females %	162 7.1	422 6.7	53 16.4	4 7.9	85 7.3	726 7.1
Number of pronouns assigned to males %	2,119 92.9	5,957 93.3	270 83.6	47 92.1	1076 92.7	9, 469 92.9
Number of attributes assigned to females %	36 5.6	95 12.1	-	5 22.2	11 10.7	147 9.4
Number of attributes assigned to males %	609 94.4	694 87.9	4 100	14 77.8	92 89.3	1,413 90.6

In Table 72 the predominance of the male sex in the language of the schoolbooks is obvious. From a total of 10,195 pronouns only 726 referred to the female sex while 9,469 (92.9%) referred to the male sex.

147 (9.4%) of attributes were assigned to females and 1413 (90.6%) assigned to males. The female presence is very low.

The list of attributes assigned to males is quite long and includes both positive and negative attributes.
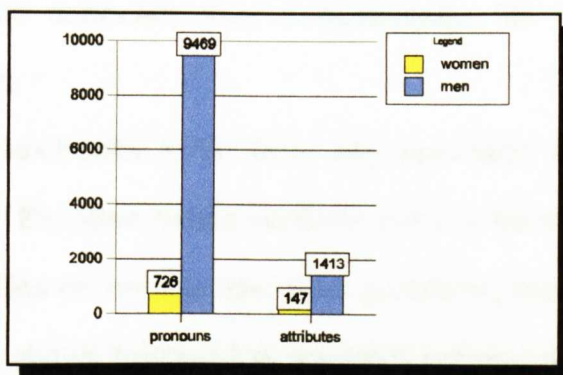
Figure 61. Linguistic Content.

Most of the attributes assigned to females are associated with the physical portrayal of women: beautiful, pretty, charming, elegant or emphasise the passivity and the lower status of women: quiet, modest, sweet and virginal.

Women's and men's activities are divided into public professional work, on the part of the men and domestic labour on the part of the women. Even working women differ only slightly from the standard image. Furthermore, there is no indication that the woman enjoys her work or does it for any reason other than financial necessity. Nowhere is a woman presented with professional ambitions, fighting for her career and her professional status. Even today such an image seems to be condemned in writers' minds since it does not correspond to the stereotype of a good mother. On occasion, the fact that women work is just vaguely mentioned in the textbooks. Rarely is the woman portrayed in her work-place. The daily problems that a modern woman has to face are not mentioned anywhere. Consequently, these images twist present-day social reality and the statistical data which shows us a constantly increasing number of working women and furthermore, in positions of high prestige and financial compensation. In addition, these textbook images have a negative impact on children of both sexes. Girls cannot find a positive standard to follow. Work is presented as an absolutely masculine field, where women

cannot succeed and even if they do succeed, they consequently fail in everything regarding family and children.

The family life depicted in the textbooks is far from any approach to reality. Financial problems which in real life often cause conflicts within a family are taboo in all textbooks. These families do not discuss their problems, their worries and troubles. The family is not shown beyond the standard pattern, so children cannot face new prospectives and speculate about them. Although the one-parent family is a phenomenon that seems to have increased in the last few years, there is no reference made to the problems which such families have to confront. The only alternative solution to religious marriage is civil marriage. Everything is beautiful and ideal in families described in the books and of course this differs from most pupils' families which have problems to face on a daily basis.

In the textbooks there is an effort to present the family participating in household chores. It seems that the progressiveness of writers reaches up to this point. Apart from the cooperation in domestic affairs, hardly any common activities occur. Men are depicted more often in activities and professions which demand strength and creative abilities. Men occupy the centre and women exist on the periphery. Men have been assigned a wide range of activities. The work associated with the image of the male involves intellect, imagination and problem solving ability. On the other hand, females are found to be associated with nurturing, and service-oriented work.

In the public sphere men are the ones who have prestigious jobs and occupy positions of power while women, when portrayed outside the home, have access only to a very narrow range of occupations and activities.

Women are sometimes presented in masculine activities, such as participating in local affairs, but men are seldom shown in feminine activities. The only female activities that they perform is to shop for the house, an activity connected to their economic ability, and to help to set the table. When men take part in domestic activities, they repair the house, do the garden, or do the painting, etc. Girls can be shown to play with a ball but boys never play with dolls. It seems that there is a stricter stereotype for boys than for girls.

Table 73. Appearance of Males and Females in Activities

SUBJECTS	H	R	M	S	SS	TOTAL
Domestic tasks for women	15	3	24	-	8	50
Domestic tasks for men	1	1	13	-	4	19
Child care activities for women	4	11	3	-	4	22
Child care activities for men	-	8	-	-	2	10
Leisure activities for women Active: Passive:	3 5	3 11	9 11	- -	1 2	16 29
Leisure activities for men Active: Passive:	31 16	7 6	28 21	9 -	28 3	103 46
Political and social activities for women	1	8	-	-	11	20
Political and social activities for men	77	31	13	3	97	221

None of the books attempt to discuss the reasons for excluding women from public and professional life and why they were hidden from history. The textbooks clearly reflect sexist concepts which divide the human race into two

Figure 62. Appearance of Males and Females in Activities.

groups: superior men and inferior women. On the one hand, men are active, courageous, independent, creative, strong, interested and successful in the public, outer world, competent in technical matters, and rational human beings.

The textbook males, in fact, possess all those qualities which are highly valued in our culture.

On the other hand, women display passive, dependent, irrational and emotional behaviour, are anxious to please and interested in their domestic private sphere.

The distinction between the sexes is made indirectly, through the fact that men are always shown in interesting roles.
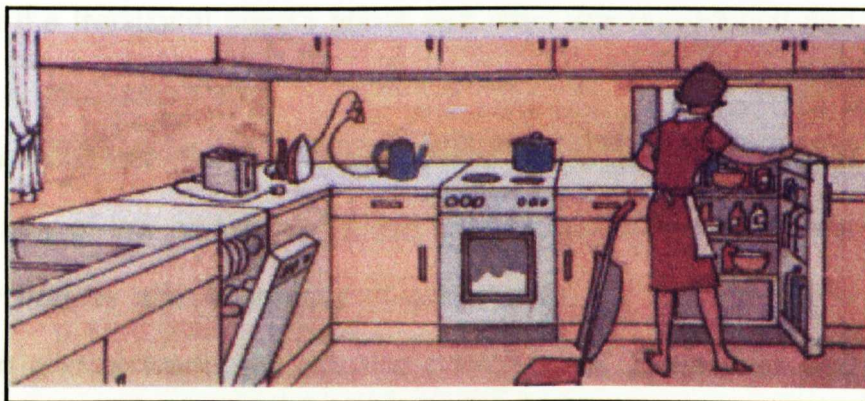
Illustration from 5th Year Science Textbook, 1991, 157. The lesson is about electricity. The woman is presented in the traditional role of housewife wearing an apron.

Men are portrayed with care and consequence while the image of women is presented in rather a fragmentary and vague way.

Men are conquer the historical, geographical, cultural, political and professional worlds. Men solve problems, make the decisions and control all the property. A woman's main duty is still considered to be that of housewife and mother.

The discriminatory images, internalised by the pupils through the process of socialisation, affects females in terms of what they do and what they think of themselves. The stereotypical feminine traits portrayed as desirable for females subtly encourage women to become incompetent human beings.

Of course, the outcome of the present study is in accordance with multiple studies carried out, outside Greece and mainly in Anglo-Saxon countries in the 70's. A common finding is that the roles, professions and traits of the two sexes shown in textbooks, agree with and mirror the dominant traditional social beliefs about sex roles. Thus, school textbooks remain one of the media in which the traditional beliefs about sex roles are reproduced and perpetuated.

As noted in Chapter 5, the Greek State provides constitutional guarantees for equality of law and opportunities to both sexes. The state has defined with clarity that its aim is equality of opportunity for women in the family, in education and at work. Despite the constitutional guarantees and policy objectives, the analysis of the sample textbooks indicates that the educational content discriminates against women.

These books do not help pupils find their identity and develop their personality in a way that will help not only themselves but society as well. It appears that the educational reality helps mainly in developing maximally male personalities, by supplying them with every skill and chance they may need. The content does not reflect the changing socio-economic role of women. To lessen traditional stereotypes will be a step towards the liberation of children from sexist discrimination. To change textbooks seems rather utopian to many people who feel that books are in any case a reflection of the society we live in. Nevertheless, half our society consists of women, therefore women should occupy half of the books' content.

The present officially endorsed textbook system in Greece should be reformed. The textbook compilation system should be reformed under a new system in which under the guidance of the Ministry of Education diverse

development and choice of textbooks is possible. More women experts should participate in the process of studying and developing textbooks.

Considering the influence of textbooks upon children's socialisation, it is necessary to eliminate gender role bias in the existing textbooks. Textbooks must be rewritten to bring females into the texts and to eliminate stereotypes by portraying a diversity of roles for both males and females.

Books should be more flexible in the presentation of sexes, offering a variety of roles and avoiding stereotypes and perpetuated prejudices. Textbooks must offer children an expanded spectrum of modern role choices instead of a narrow range of traditional models. The textbooks should embody positive female images, showing women's contribution in every field.

There should be a conscientious attempt by the writers of the books to include women in their content. It is interesting to mention that books are basically written by men (80 men and 14 women, see Appendix). Possibly this is another reason that influences the ideological content of books. Therefore, it would be better to have women writers as well, in order to offer models of female style to girl-pupils. Even when anthologizing passages, attention must be given to messages promoted and images regarding the roles of the two sexes.

An attempt to have an equal qualitative and quantitative presentation of both sexes, should also be made. The language used in schoolbooks must refer equally to both sexes. If the learning experiences provided by the textbooks are grounded in sexual discrimination, the healthy development of the individual in all human aspects becomes difficult.

The reform of textbooks should be combined with the parallel sensitization of teachers, because the teachers' consciousness and attitudes

are of vital importance. Sexual discrimination in the attitudes of teachers appears serious. The teachers are not free from the traditional gender role concepts and stereotypes. How teachers behave in class is as important as what they teach. The teachers must focus attention on examples of inequality and discuss them with children, in order to help them to overcome the messages implicit in stereotype images. Discussion in the class seems to play an important role in changing attitudes. The teachers are probably the most important element in changing sexist attitudes, provided that they are sensitized and willing to cooperate.

In order to change present teachers' fixed ideas about gender role, a re-education programme for teachers should be provided. There is a need to sensitize teachers immediately through seminars and educational programmes. Furthermore, in university training departments, gender considerations should be added to the programme of studies in order to inform and sensitize the educators. Apart from the initial training of teachers there should be more in-service training and an emphasis on attendance of these courses.

The organisation of the school has many opportunities to offer in diminishing stereotypes. The relations between teacher and pupils, the hierarchy of educational staff and the school rules can all demonstrate principles of equality or just the opposite. As we have already seen, the school system reproduces the traditional models of work distribution. There are the usually observed phenomenon, that executive posts are occupied by men and also the fact that women are always assigned the lower grades and men the higher.

The school curriculum must be more relevant to the realities of the world outside school and prepare pupils for a successful passage from school life to

the social and professional one of adults.

Another direction for reform is introducing educational managers. Changes in the organisation of the school system and content are not effective when not accompanied by progress in this field. Therefore, directors, school advisors and supervisors, should also attend educational programmes.

In addition, parents ought to participate and support the school in introducing and maintaining principles of equality. Another way of sensitizing parents is through seminars organised by the school, the distribution of informative brochures or meetings held between teachers and parents in school for discussion of these problems.

Of course, changes only in the educational system will not achieve all the aims. It is necessary for wider changes in society to take place. Nevertheless, the educational field has the potential to intervene positively in this subject. The changes in an educational system have an important influence on society, because a lessening of the degree of sexism and discrimination between the sexes in education, will help in the formation of individuals and play a pivotal role in diminishing sexist attitudes in society at large.

The expectations that boys and girls have to face in modern society seem rather conflicting. They are expected to follow the traditional system of values and become men and women and on the other hand, to believe in sexual equality and equal rights. A woman's role seems more complicated and laborious. Now a woman is required to be a good wife, mother and housekeeper and also to have a good profession in order to contribute to the family's financial obligations.

Since the Greek state spotlights the principles of equality, it is therefore obliged to contribute with decisive interventions in the elimination of the traditional stereotypes concerning the sex roles. School is a medium that can contribute positively in this direction. Furthermore, every one of us must help in the formation and socialization of children free from social prejudices, able to develop all their potential, with flexibility and adaptability to social changes.

APPENDIX A

Sources

Religious Education Textbooks

1. **Barella, A., Ganouri, E. Dandis, Pilakou, Z. & Sotiropoulos, I.** (1992), *Our Life with Christ for 3rd Grade*, Athens:OEDV, (Books 1 & 2).

2. Stefanidou, B. (1992), *New Testament*, 4th Grade, Athens:OEDV.

3. Skiadas, B. (1990), *Religious History*, 5rth Grade, Athens:OEDV.

4. Grigoriadis, K. (1993) *Passages from Testament,* 6th Grade, Athens:OEDV.

History Textbooks

1. Aktipis, D., Kaila, M., Katsoulakos, T., Papagrigoriou, G. Horeanthis, K. (1990) *The Old Years, History for 3rd Grade,* Athens:OEDV.

2. Aktipis, D., Velalidis, A., Katsoulakos, T. & Horeanthis, K. (1992) *Ancient Years,* 4th Grade, Athens:OEDV.

3. Asimomitis, B., Kaila, M., Nikolopoulos, N., Papagrigoriou, G. & Salvaras, G. (1992) *Byzantine Years,* 5th Grade, Athens: OEDV.

4. Aktipis, D., Velalidis, A., Kaila, M., Katsoulakos, T., Papagrigoriou, G. & Horeanthis, K. (1993) *Recent Years*, 6th Grade, Athens: OEDV.

Science Textbooks

1. Daskalakis, D., Zikidis, M., Theodosiadis, A., Konstas, K., Lymberopoulou, S. & Spiliotis, M. (1991) *I Search the Science World,* 5th Grade, Athens:OEDV, (Books 1 & 2).

2. Alexopoulos, B., Therianos, O., Konstas, K. & Florakos, G. (1990) *I Search*

the Science World, 6th Grade, Athens:OEDV, (Books 1 & 2).

Mathematics Textbooks

1. Apostolikas, G., Dionysopoulou, T. & Salvaras, G. (1989) *My Mathematics,* 1st Grade, Athens:OEDV, (Books 1 & 2).

2. Apostolikas, G., Dionysopoulou, T. & Salvaras, G. (1991) *My Mathematics,* 2nd Grade, Athens:OEDV, (Books 1 & 2).

3. Athanasakis, A., Alexandrakis, G & Dimou, G. (1993) My Mathematics, 3rd Grade, Athens:OEDV, (Books 1 & 2).

4. Apostolikas, G., Dionysopoulou, T. & Salvaras, G. (1992) *My Mathematics,* 4th Grade, Athens:OEDV, (Books 1 & 2).

5. Alvanos, G., Dimou, G., Zervas, G. & Broumas, K. (1990) *My Mathematics,* 5th Grade, Athens:OEDV, (Books 1 & 2).

6. Alvanos, G., Apostolikas, G., Dimou, G., Zervas, G., Magos, M., Broumas, K. & Salvaras, G. (1992) *My Mathematics,* 6th Grade, Athens:OEDV, (Books 1 & 2).

Social Studies Textbooks

1. Georgokostas, G., Bellas, T. & Skopas, N. (1989) *Ourselves and Our World,* 1st Grade, Athens:OEDV.

2. Georgokostas, G., Bellas, T., Benekos, A. & Skopas, N. (1992) *Ourselves and Our World,* 2nd Grade, Athens:OEDV, (Books 1 & 2).

3. Kazazi-Patinioti, M., Leontaris, A. & Hristias, G. (1990) *Ourselves and Our World,* 3rd Grade, Athens:OEDV, (Books 1 & 2).

4. Georgokostas, G., Leontaris, A., Bellas, T., Benekos, A., Skopas, N., Hristias, G. & Hristodoulou, S. (1990) *Ourselves and Our World,* 4th Grade, Athens:OEDV, (Books 1 , 2 & 3) .

5. Hristias, G., Klonari, A., Alexopoulos, B., Papamanolis, K. (1989)

Geography, 5th Grade, Athens: Grade.

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