Questioning Gender through Deconstruction and Doubt

Cecile K. M. Crutzen
Open University of The Netherlands, The Netherlands

Erna Kotkamp
Utrecht University, The Netherlands

INTRODUCTION

Questioning gender can lead to a reformulating research into: "Why did the hard core of methods, theories and practices of the informatics discipline and domain become a symbol for masculinity?" and "Why is femininity constructed as situated only in the discipline's soft border of the interaction with the users of ICT-products?" In the view of Judith Butler, questioning gender is a strategy to disrupt the obvious acting of every actor, designers and users in the informatics domain:

The abiding gendered self will then be shown to be structured by repeated acts that seek to approximate the ideal of a substantial ground of identity, but which in their occasional discontinuity, reveal the temporal and contingent groundlessness of this "ground." The possibilities of gender transformation are to be found precisely, in the arbitrary relation between such acts, in the possibility of a failure to repeat, a deformity, or a parodic repetition that exposes the phantasmatic effect of abiding identity as a politically tenuous construction. (Butler, 1990, p.141)

In every interaction world, there is a continuity of ongoing weaving of a complex web of meanings in which we live, constructed by the interactions that take place in that world.s In that web of meanings, gender is a web of meanings on women and men, masculinity and femininity, which is connected to other webs of dualistic meanings. Gender is a process[1] in which the meaning of masculinity and femininity are mutually constructed, situated at symbolic, individual and institutional levels of a domain. All social activities, practices, and structures are influenced by gender. The meaning of gender is thus embedded in social and cultural constructions and is always dynamically linked to the meaning of many concepts, such as technology or the relation between use and design. The performances of gender are the symbols for power relations in a domain (Harding, 1986; Scott, 1988).

RE-GENDERING THE INFORMATICS DOMAIN

Gender is covered by the unquestioned habits of the domain and discipline of informatics. The performance of gender can become visible through questioning and doubting: What has been overvalued, what has been undervalued and what has been ignored? The deconstruction[2] of the opposition "use-design" will function as a source for doubts on the discourse and the acting, methods and theories in the informatics discipline and the application of information and communication technologies (ICTs) in the informatics domain. Analyzing these kinds of power oppositions, such as use-design, could prevent the risk of reducing masculinity and femininity to fixed attributes based on biology and sex. The hierarchical opposition "use-design" is linked to other oppositions, such as "technical-human," "hard-soft" and "secure-doubtful." These gendered symbolic links are established and reinforced through the military, mathematical and technological traditions of the informatics discipline and through concepts of female informatics based on essentialist and deterministic views on femininity and technology. Strategies to destabilize this matrix of links are not easily found and executed for female ICT professionals. To

accept the established horizon of the informatics discipline means to lose the potential of doubt, because socialization demands a commitment to the practices of the discipline. To oppose could be interpreted as a reinforcement of the link between the technical-social and male-female oppositions.

Use and Design of ICT Representations

Deconstruction of the opposition "use-design" in the informatics domain reveals that use and design are treated as activities in different worlds—the world of senders and the world of receivers—while ICT products are seen as the exclusive links between these worlds. ICT representations are perceived as the products of a design process if the product is new and innovative in the receiver world whether that the process of making was only a process of applying obvious methods and routines of the informatics discipline.

The symbolic meaning of use and design is constructed as an opposition in which "design" is active and virtuous and "use" is passive and uncreative. Designers see themselves and are seen as makers of a better future and working in a straightforward line of progress. Designers follow the ideal of making ICT products that cause no disturbances and fit completely within the assumed expectations of the users. The concept of "user friendliness" is based on this notion of non-problematic interaction, doubtlessness and reliability of interaction. "Good" design is defined as making a product for users that should not create disharmony or doubt in the life of the users. Easiness is equal to progress and "user friendliness" (Markussen, 1995).

There is a dominant belief in the objectivity of values: a belief that qualities as "good," "innovative," "friendly," "secure," and "reliable" can be measured objectively and that their achievement can be planned in advance before sending the product into the users' world. The design of ICT products is characterized as decision making, problem solving, optimizing, controlling, prescribing and predicting, and therefore has become an activity of displaying power. Design is focused on generalized and classified users. Users are turned into resources, which can be used by designers in the process of making ICT products.[3] The announcement of new products often is performed like a religious proclamation. The use of expert languages and methods within the closed-interaction world of informatics also establishes the dominance of design over use.

Cause, Doubt, and Change

One of the main causes of the hierarchical opposition between use and design is that oversimplified models for interaction and communication are used in the informatics domain. For instance, "use-cases" in UML are presented in simple action-reaction diagrams. In models such as the transmission model and the impulse-response-model, there is no room for processes of meaning construction. "Communication" is defined as the transmission of representations from a sender to a receiver through a neutral channel. Transmissive models of communication do not have "a message to the message." The meanings of a message, the role of sender and receiver, are fixed and separated. The sender has the active role and the receiver has the passive role.

The channel of communication is conceived as neutral. It cannot influence the interaction of sender and receiver. There is no room in the models for negotiation or doubt. Interaction and communication are only defined on a technical and syntactical level but then are used on semantic and pragmatic levels to construct planned and closed interaction. The semantic and pragmatic ambiguities that occur in "being in interaction" are ignored. Ambiguity is seen as troublesome and inconvenient and, thus, has to be prevented and "dissolved" at the technical and syntactical level (Crutzen, 1997, 2000).

Those models of interaction are frozen into the behavior of computer scientists and into the ICT representations they themselves use and apply and force back onto the informatics domain by ICT products ready-made for users. Design in informatics is seen as making a product for a remote world, whose interaction can be modeled from a distance and without being experienced. In the process of making ICT representations, professionals are mostly not designing but using established methods and theories. They focus on security and non-ambiguity, and are afraid of the complex and the unpredictable. Meaning construction processes have disappeared in processes of doubtless syntactical translation.