Why Design Needs Copyleft

Dr. Lakshmi Murthy maintains that the unfettered use and distribution of design is essential for the development sector. At Jatan Sansthan, an NGO in Udaipur, Rajasthan, a group of teenage girls and boys sit in a circle, cutting and stitching pieces of cloth according to a pattern in front of them. The girls take the finished product home for personal use, while the boys gift it to a menstruator. The group has been sewing reusable cloth sanitary pads.

These biodegradable, reusable sanitary pads are called *Uger*, which means ‘a new beginning’ in Mewadi, the local language. The designer of the *Uger* pads is Dr. Lakshmi Murthy, Founder of Vikalp Design and Additional Director, Jatan Sansthan. However, Murthy has no desire to claim or copyright the design of the pads. In fact, she hopes that
other organisations and communities will take the *Uger* design, work with it and modify it according to their needs. Murthy is a staunch advocate of Copyleft, particularly in the developmental sector.

*Copyleft* distinguished from copyright, is the practice of offering people the right to freely distribute copies and modified versions of a work with the stipulation that the same rights be preserved in derivative works created later.

- the freedom to use the work
- the freedom to study the work
- the freedom to copy and share the work with others
- the freedom to modify the work, and the freedom to distribute modified and therefore derivative works


**The Pandora’s Box of Menstrual Health**

After graduating from the National Institute of Design, Ahmedabad, in 1986, Murthy founded Vikalp Design to design social communication tools for non-literate and semi-literate communities. Her subsequent research into menstrual health for these communities, she says, “opened up a veritable Pandora’s Box.” Menstruation is surrounded by silence and superstition. The common practice of fashioning absorbents from discarded pieces of dark cloth and not washing or drying this properly, can lead to infections. Taboos abound and poor sanitation
facilities at schools mean that girls frequently miss classes during their period.

A deluge of marketing communication has ensured that disposable, branded sanitary pads are seen as healthier than reusable options. The environmental cost of disposable pads is staggering, as most are made up of 90% polymer-based materials. A person will discard around 5000 disposable pads in a life-time, covering an average of 40 years of menstruation. It is estimated that these sanitary napkins can take 500-800 years to break down.

After receiving a fellowship from the MacArthur Foundation in 2000, Murthy began what would become a lifelong commitment to improving menstrual health management, while advocating Copyleft policies.

“A Copyleft approach provides building blocks and a starting point, with the right to copy and modify solutions, and in the process excluding no one.”

Dr. Lakshmi Murthy

Copyleft for the Greater Good

Murthy points to three specific examples from her own work to demonstrate why Copyleft is important: the menstrual wheel, gender growth charts and reusable pads (the pads come with an instruction kit on how to make them).
The menstrual wheel is a bi-lingual piece of collateral in the shape of a wheel, to provide much-needed information about the menstrual cycle. The first reusable pad that Murthy designed, was for rural adolescent girls and women who, at that time, did not have access to underwear. Based on the concept of the *langoti* or loincloth, the pad had two straps on either side, which led to the name *Lace Wala Kapda* or the ‘Cloth with straps.’ The demonstration doll was a cardboard doll to demonstrate pad-wearing to participants at training programmes. All three products were extensively field-tested and then implemented with over 800 adolescents in Rajasthan.

In keeping with her Copyleft philosophy, Murthy has always offered the products for free use, with no strings attached.

**Use and Improve**

Murthy’s products have been used and modified by multiple organisations over the years. In 2012, The Water Supply and Sanitation Collaborative Council (WSSCC), a United Nations member organisation, partnered with the Nirmal Bharat Yatra, for a Government of India roadshow that sought to educate people about sanitation issues, including menstrual health. The roadshow showcased the menstrual wheel, the doll and the *Lace wala kapda*.
Subsequently, WSSCC reprinted the menstrual wheel with modifications. Users could now calculate the days in their cycles through yellow and red dots. An oath to break the silence around menstruation was printed at the back and adolescent girls were encouraged to read this aloud in menstrual care workshops. The wheel was produced in several languages, including Chinese and French.

Exhibit B: The menstrual wheel has been adapted, modified and reproduced in multiple languages by WSSCC

Embracing the Copyleft philosophy also means accepting that changes may deviate from the original design vision.

The first avatar of the gender growth charts used a Kaavad, a traditional wooden storytelling device with layers of sliding doors. Health workers found this too bulky and Murthy modified it into a paper version with accordion folds. The charts, called ‘We change as we grow,’ had two founding design principles:

- First, to preserve modesty, the reproductive organs were only seen when a flap on the clothed figure was lifted.
- Secondly, the viewer should be able to see the different male and female growth stages at a glance.
In a later adaptation by WSSCC, the pattern was altered again. (See Exhibit D). The visual drama of comparing growth at one glance was lost. Murthy is stoic about this. “It is regrettable when a product that has been tested in the field, is replaced with another version, but that's part of Copyleft. The original designer must prepare to be invisible.”

Murthy points out that the Copyleft approach may also see a creative product being broken down to as simple a form as possible. She gives the example of a tool she has developed to allow trainers to provide nutritional information (an important part of menstrual health). (See Exhibit E).
Research showed that explaining the concept of balanced food was best done by matching the food with the colours of the flag. As each colour flap is lifted, it reveals foods corresponding to the colour. The concept of colours is further reinforced by matching it with a thali of food. The tool is simple and easy to reproduce and the flap-lifting introduces an interesting element of ‘drama’. (Murthy used this successfully for cascading training for over 700 ASHA workers in Uttarakhand from 2007 to 2009).

To suit project budgets in later use, however, the tool was reproduced as simple text and photos in a resource book for health workers of the Aga Khan Nizamuddin Basti Urban Renewal Initiative.

The Delays of Copyright

Aren’t most products in the developmental sector free for use without copyright restrictions? Murthy says that many organisations will add a rider, asking users to seek permission. This causes delays and adds a bureaucratic layer that is unwarranted when the ultimate objective is the greater good. She points to the current pandemic as an example. Murthy’s team started sewing simple, reusable cloth masks from March 15th 2020. By March 25th, the mask design with instructions had been sent to the Government and by April 2nd, it was live on their
website. This kind of speed, she says, is only possible with a Copyleft approach.

“If I design a toy that provides a therapeutic exercise for handicapped children, then I think it is unjust to delay the release of the design by a year and a half, going through a patent application. I feel that ideas are plentiful and cheap, and it is wrong to make money from the needs of others.”

Viktor Papanek, Design for the Real World. 1971

The Rewards of Copyleft

The Lace wala kapda was redesigned over the years as the use of underwear became widespread. As part of her Ph.D thesis at IIT Mumbai, Murthy developed the Uger pad, which can buttoned under the crotch of the underwear.

Late last year, Murthy received a picture of a market in Mohor Village, Dima Hasao, Assam. There was a cluster of women around a small stall from which Uger pads fluttered. Two women from a Self-Help Group (SHG) had attended a pad-making workshop at Jatan Sansthan as
part of a collaborative intervention[1]. The group is now making and selling the pads in their hometown. Another SHG Group, Nightingale Federation in Bordumsa, Arunachal Pradesh, supplies *Uger* cloth pads to the local administration, who in turn distributes the pads to school-going girls. The federation has renamed the pads and calls them ‘Pyo Pads’ (*Pyo* means ‘happy’ in the dialect of the Singpho tribe in Arunachal Pradesh.)

![Image](https://via.placeholder.com/150)

**Self-Help Groups in the North-East selling pads based on the *Uger* design**

Water Aid is also disseminating the design of the *Uger* pad during the pandemic by printing pad-making instructions.
Murthy believes that all this is possible because of her Copyleft approach that does not demand credit or attribution. To know that her work is meaningful and to see it serving progressively larger audiences, she says, is reward enough for her.