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Humanitarian action - expanding the ethics of the profession.

Concepteurs Lumière Sans Frontières (LSF – Lighting Designers without frontiers) is a humanitarian association that has been in existence for ten years. It comprises over fifty members worldwide. These include not only lighting designers, but also engineers, manufacturers, and more.

LSF's mission is the transfer of professional skills and knowledge to stakeholders and constituencies who cannot afford the services of a lighting designer, and/or in countries where the education and training necessary to develop the profession do not exist.

LSF has realised a number of projects to date: in Bamako, Mali, in collaboration with Energie du Mali (2008 - 2010); in Amathole, South Africa, in collaboration with LUCI and the City of Amathole (2010 - 2013); and in Port-au-Prince, Haiti, in collaboration with Fondation Connaissance et Liberté – Fokal (2010 to the present).

LSF in Haiti

Fokal is a Haitian non-profit member of the Open Society Foundations network whose mission is to support key societal sectors to bring positive change in Haiti, and it is engaged in many collaborations with organisations and local communities in the fields of education, arts, culture, civic engagement and development.

The partnership between LSF and Fokal began in the aftermath of the 2010 earthquake when Isabelle Corten,¹ then a member who has now served as president since 2012, responded to a call that the Brussels-based urban planning organisation "Quartiers pour Haiti" (Neighbourhoods for Haiti) had launched on social media.

The first project included the Gingerbread House Preservation Project and the Maison Dufort site-school, both part of an effort to redevelop the historical centre and preserve landmark buildings in Port-Au-Prince. Since then, Fokal has also involved LSF in Martissant – in the south-western part of the capital city – where it manages and operates three large projects for the government:

- ⇒ The Parc de Martissant: this green lung was created on property donated by the Mangones family, and it includes a memorial for the victims of the earthquake, the Katherine Dunham Cultural Centre (CCKD) and gardens
- ⇒ The Résidence Leclerc: the former luxury resort, which played host to 1970s' celebrities such as Mick Jagger, was also converted into a park and a nursery, and forthcoming amenities include playgrounds and a centre for botanical science residencies
- ⇒ The Zone d'Aménagement Concerté de Martissant (ZAC): the mixed development project covers the expansive informal settlements that surround both parks and snake up the hillsides.

LSF collaborated as a team with Fokal and the residents on the educational sessions, workshops, day and night walks, while individual members led each project. Corten and Nicolas Frapolli led the Gingerbread project by heading workshops and providing expertise for the 2012 Haitian-Belgian exhibition "Haiti: Quand les Fanaux et Gingerbreads se Souviennent" in Liège and for a lighting masterplan "Gingerbread: Lumière et Mémoire". Raphael Girouard² developed design recommendations and oversaw their implementation to establish the nocturnal visibility of the memorial and of the CCKD and the gardens in the parks with Frapolli. Nathalie Rozot³ analysed and researched the lighting problem in the ZAC, and developed a strategic plan for the implementation of solar-powered lighting with short to long-term solutions, which will serve as a methodology for LSF's future projects.



Fig. 1: Participatory workshop, 2014. Photo: LSF.

Project: The Right to Light in the informal settlements of Martissant

The population of Martissant's informal settlements is estimated at 50,000.4 Minimal access to water, health-care and sanitation cripple the residents' living conditions, and a study led by Fokal with "Doctors Without Borders" between 2007 and 2009 revealed that many health casualties were due to falls and tied to the lack of lighting. In 2013, Fokal involved LSF in the planning of the electrification project it had since undertaken.

Analysis, research and strategy

After on-site visits and analysis, LSF communicated its preliminary diagnosis and proposal to Fokal and the residents by means of presentations and workshops. Rozot's proposition was two-fold: lighting could be treated as a stand-alone project, addressed in the short term with off-grid lighting solutions and reassessed in the long term based on the outcome of the electrification endeavour. In addition, site conditions could be structured in three distinct scales and uses with a lighting solution for each: streetlights for major streets and public areas such as playgrounds; solar systems or kits for the winding pathways (normally intended to illuminate building interiors); and portable lights for inside and outside use in homes.

Market research for product quality assurance and report and case study analyses preceded the purchase of sample products, ⁵ and LSF returned to Haiti in 2014 for on site nighttime tests and exploratory night walks with Fokal's team and the residents. LSF and Fokal also met with local manufacturers and importers to gauge the robustness of distribution channels for selected products.



Fig. 2: Night walk with residents, Fokal and LSF, 2014. Photo: LSF.



Fig. 3: On site tests, 2014. Photo: LSF.

Implementation: scaling-up from pilot projects

For the pilot phase, community representatives and residents across districts identified the locations of each stationary light. A dozen streetlights were purchased and installed in three playgrounds and in one major street in 2015. In 2016, LSF returned to the site to oversee the installation of 30 solar systems of four different models in the pedestrian pathways. The installations were carried out by builders from the community whom Fokal hires for most construction work within the settlements.

Children and young people can now also borrow portable lights from the CCKD library for homework and art projects: in 2017, a pilot "Solar Library" was launched with 30 solar fixtures of three different models, and an artistic workshop was staged for the staff and 15 teenagers. This loan-based system will disseminate the third fixture type throughout the community and serve to attract more parents to the cultural centre.

The current budget, which expires in 2017, enabled the purchase and installation of around 500 products in



Fig. 4: Lighting installed by residents, 2016. Photo: LSF.

total (solar streetlights, systems and portable lights). Close monitoring by residents and Fokal shows minimal vandalism, high ratings and an increasing demand. The 2018 budget will support the expansion of the project with more products and LSF workshops. In the long term, its resilience will depend on the residents' accountability. Gang and corruption practices notably complicate cash transactions, and Fokal is exploring maintenance and repair training programmes for local contractors.

Fokal is also pursuing solar micro-grids with on-site electrical generation as prescribed in the initial proposal, because the scarce public lighting the electrification now provides is unreliable due to the utility company EDH's unstable central supply, and most residents cannot afford to pay for the electricity supply to their homes⁶.

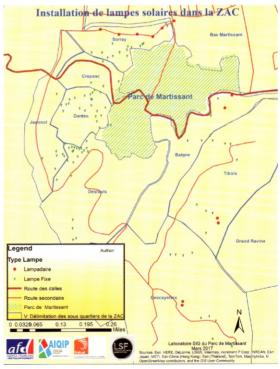


Fig. 5: Interim record of systems installed with GPS coordinates, March 2017. Courtesy of Fokal.

Conclusion:

a model for future humanitarian practices

Fokal's deep roots in the community and the analysis, strategy, research, pilots and participatory processes provided by LSF were inherent to the success of the Martissant project. As a result, this project paves the way for the development of guidelines with a practical methodology approach, which will be a shared resource so that other teams worldwide can scale-up LSF's humanitarian work. Other LSF resources will include outlines for generic or specific participatory walks and workshops.

LSF advocates the importance of social practices in our field. By sharing this project and its outcomes, the authors hope to sensitise our community, whose engagement can greatly expand the ethical stance of the lighting design profession.

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Supplementary information

¹ Corten's interest in social issues in lighting and participatory processes is longstanding. She explored safety issues at night in a low-income neighbourhood in Brussels as a student. She is a founding member of the Social Lighting Movement (SLM), which regularly organises workshops and nightwalks, and her practice Radiance 35 is known for its social values.

² Girouard is co-founder of pLuz in Columbia, and of the pluridisciplinary collective laboratory TrasNoche. He has led many community workshops in South America.

³ Rozot is the founder of PhoScope, a non-profit that develops research-based publications, projects and programmes. She has published and lectured internationally on social issues in lighting, and she is professor at the New School University where she organised the international symposium "From the Right to Light to the Right Lights" for the International Year of Light 2015 (New York, March 2015).

⁴ Fokal estimates that the number has doubled since 6,188 houses were surveyed in 2009.

 Non-profits Lighting Africa and GOGLA include the technical assessment of picoPV products and field reports of projects worldwide.
Solar-powered microgrids require an expertise other than LSF's, and the team will reach out to non-profits who work in this area.

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