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Seven ways of seeing cut flowers.

Once a status symbol and a privilege of the richest, cut flowers have become just another consumer commodity which we can buy in a supermarket. They are part of our everyday, yet we make little thought about where they come from, how they are produced and transported, what impact they have on the environment, and, ultimately, why we buy them at all.

In this exhibition, I present seven possible ways of seeing cut flowers. Some highlight the joy and beauty they bring to our homes and lives, while others see only the profit-generating commodity in them. Through the different perspectives, we can get a more colorful picture of cut flowers themselves and of the real price of their beauty.

My aim is not only to bring into discussion cut flowers and the floriculture industry, but also to highlight the underlying controversies behind everyday decisions. I firmly believe that the small individual choices we make have a large aggregate effect on our systems. Expanding our perspectives and collecting information can, therefore, allow us to make a positive impact on the environment and society.

Exhibition 'Blossoms and Shadows – Seven ways of seeing cut flowers'

submitted by Orsolya Földesi

as final project for the

Environmental Studies Certificate Program

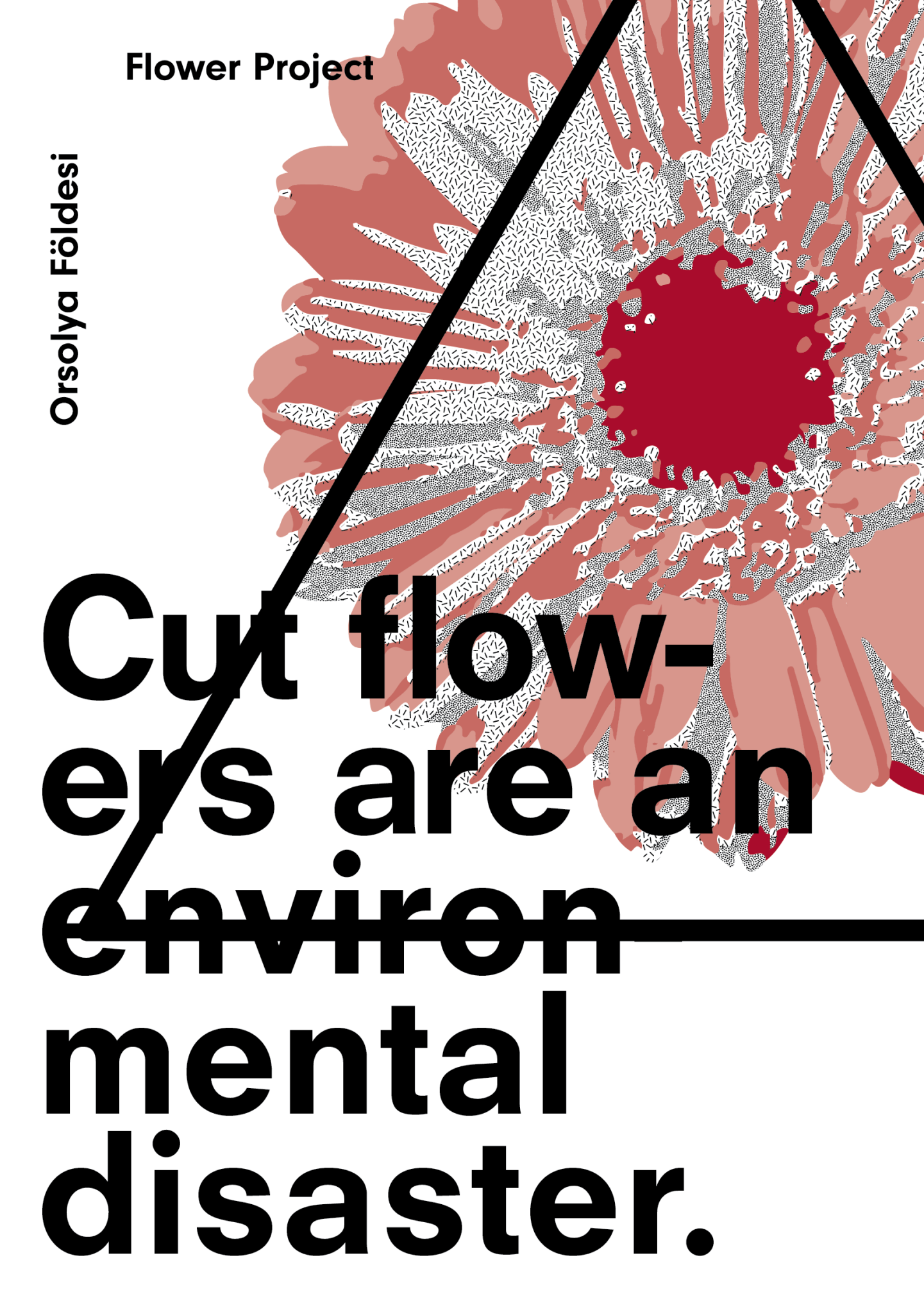


Rachel Carson Center for Environment and Society
Ludwig Maximilian University of Munich

19 July 2016

Flower Project

Orsolya Földesi



**Cut flowers are an
environmental
disaster.**

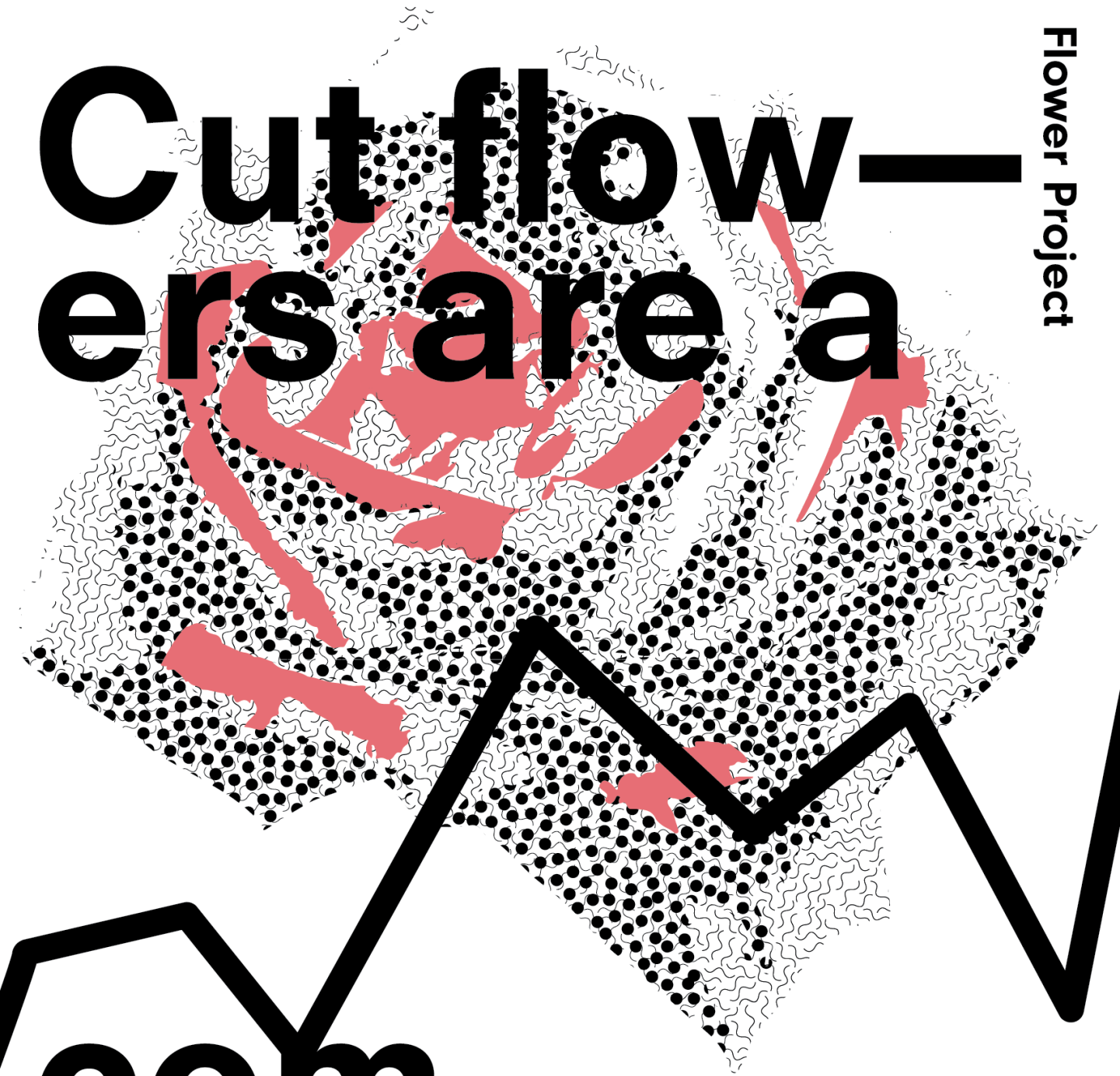
The production and distribution of cut flowers require a considerable amount of energy and resources. In order to keep pests away and to create a product appealing to all our senses, various chemicals are used during the production, storage, packaging and transportation of cut flowers. Finding the right temperature and level of humidity is also essential throughout the value chain. In developing countries, hot temperatures and the lack of efficient production systems result in excessive water usage. In developed countries, local weather conditions are not optimal for flower production in most part of the year which makes heating and artificial lighting necessary. Furthermore, to reach the market in peak condition, cooling is needed throughout the storage, transportation, and distribution processes. This all result in high energy use. Due to the sensitive nature of the product, safe packaging is inevitable, leading to heavy cardboard and plastic use. Worldwide transportation also requires a large amount of energy (mostly gained from fossil fuels) which contributes to greenhouse-gas emissions.

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**Cut flowers —
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**com —
modity.**



Cut flowers are a consumer commodity traded worldwide. A major distribution point of cut flowers is the Netherlands, where, on an average trading day, about 28 million stems are bought and sold via the well-known Dutch auction system. Between 6 and 10 am, large- and small-scale brokers sitting in the auction rooms or connecting online compete against each other for the best products and prices. While this system is still the heart of flower trade, the market has started to move towards a more direct trade between producers and retailers in order to avoid the high auction and wholesale costs. This is especially true for given markets (e.g. the United Kingdom) and market segments (e.g. unspecialised retail, such as supermarkets) where flowers are bought in bulk and end consumers are particularly price-sensitive.

Orvolya Földesi

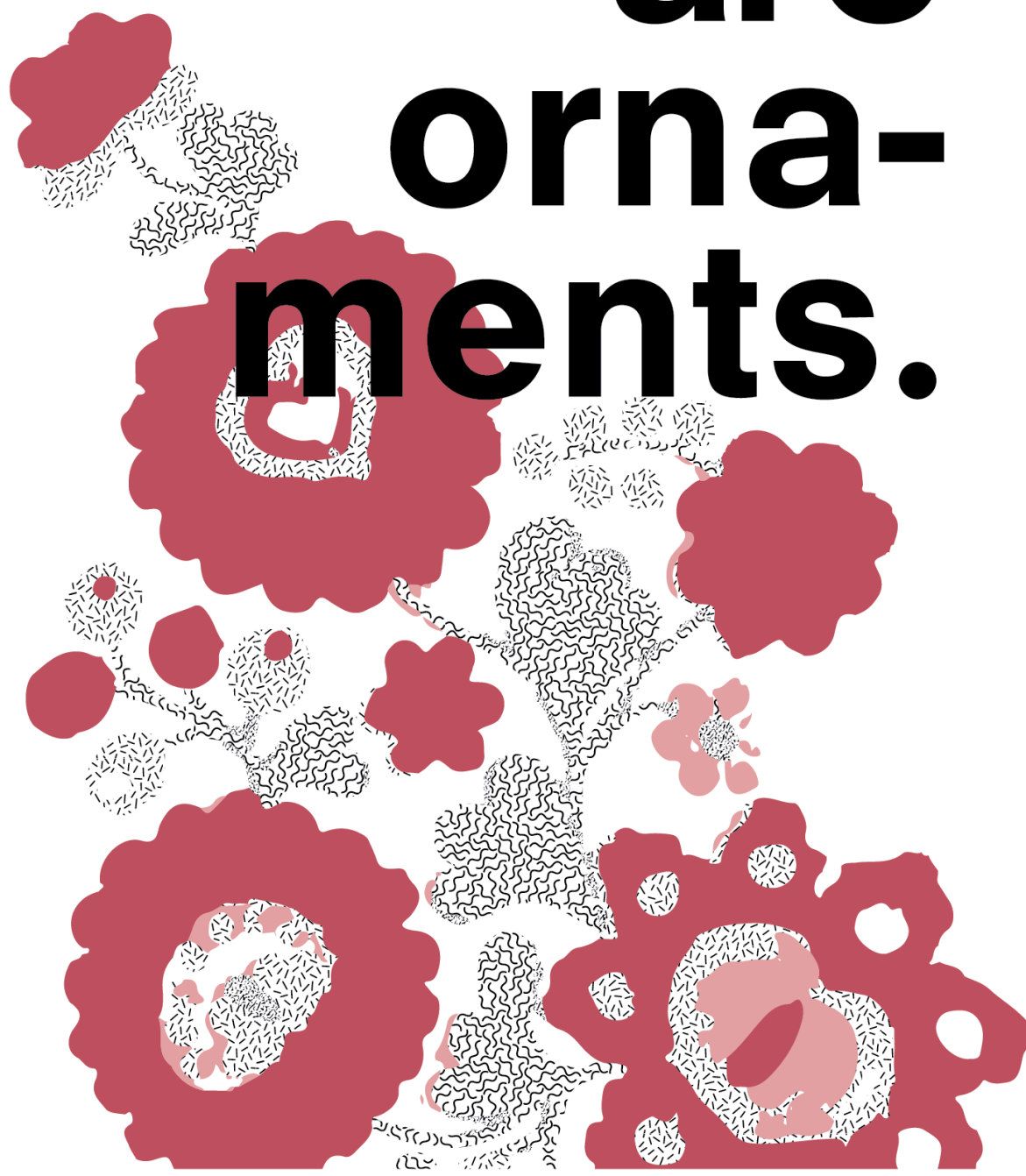
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Cut flowers
are world
travelers.

The four largest producers and exporters of cut flowers are the Netherlands (52%), Colombia (15%), Ecuador (9%), and Kenya (7%). On the other hand, the largest importers are Germany (15%), the United States (15%), the United Kingdom (13%), and the Netherlands (10%). In order to reach their final destination, cut flowers have to travel around the world. In some cases, this happens by sea—sea freight is, for example, the most common way to complete the 9,000 km trip between Colombia and the Netherlands. More typically, however, flowers are transported over longer distances (e.g. from Africa to Europe) via air freight, and shorter distances (e.g. within Europe) in trucks. Quick delivery is especially important as flowers are a perishable commodity. In many cases, the time between cutting them and reaching the end consumer can be reduced to less than 72 hours.

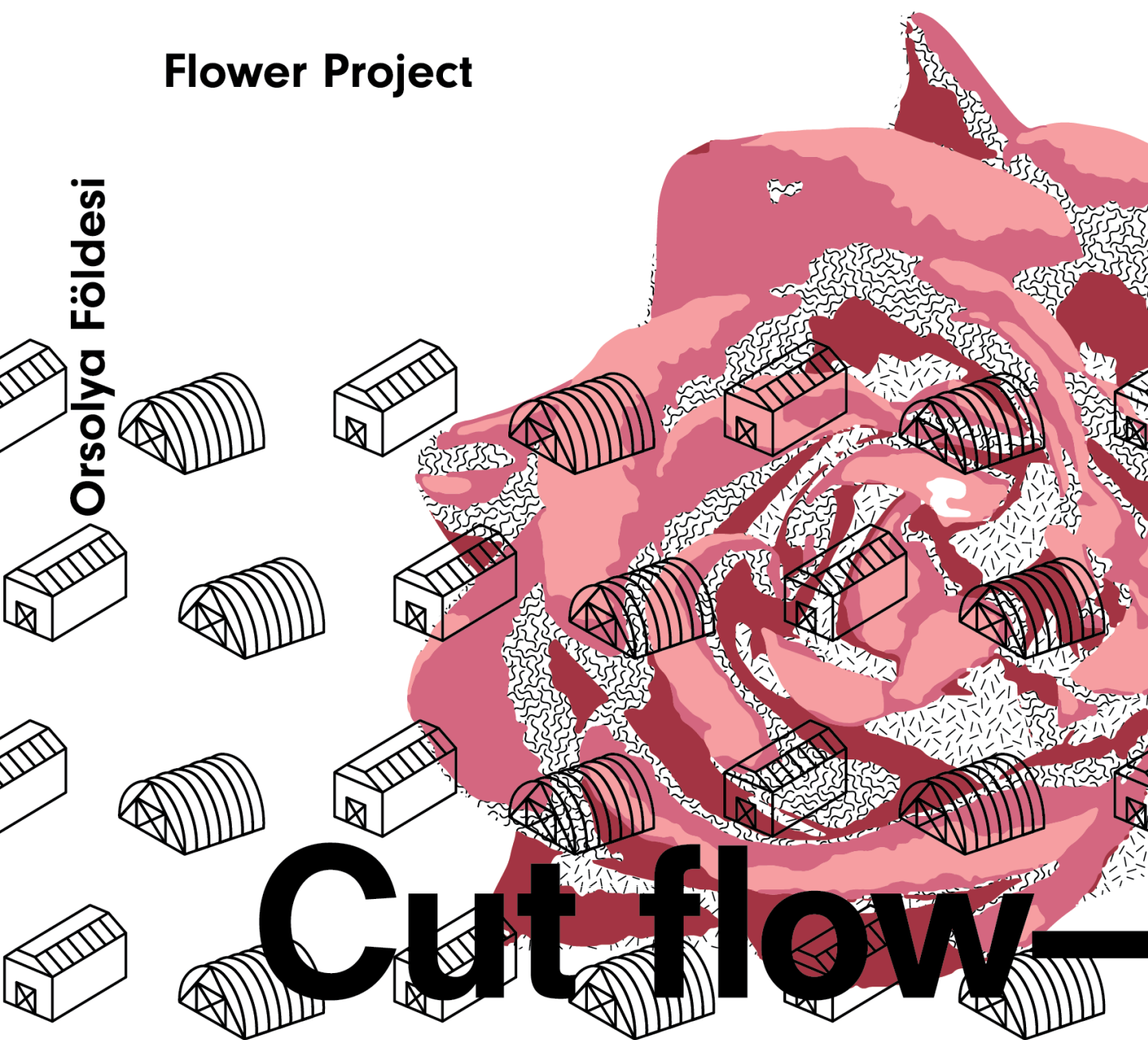
Cut flowers are orna- ments.



Whether some fresh flowers cut in your own garden or the fair-trade roses bought in the local supermarket, cut flowers serve as perfect ornaments to bring beauty and nature into our homes. While nowadays, cut flowers are mostly placed in vases, there have been many other popular forms of presenting them over the course of centuries and in different cultural contexts. Ancient Romans and Greeks preferred garlands and wreaths, but also placed flower petals in bowls or tossed them upon the bed or the floor. In Ancient Egypt, garlands, wreaths and floral headdresses were the most popular forms, although we see evidence of flowers placed in vases too. In Ancient China, cut flowers often stood on temple altars or were carried around in baskets. In Japan, the arrangement of flowers has been an elaborate and unique art since ancient times, resulting in various creative forms of displaying them—often with other decorative elements, such as candles.

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**Cut flowers
are a
job op—
portunity.**

The floriculture industry creates job opportunities for many skilled and unskilled workers throughout the value chain. It is of particular importance in the developing countries of Africa and Latin America where work is scarce. In Kenya, for example, about 1% of the population depends on the floriculture industry. However, flower farm jobs rarely ever pay above minimum wage. According to a 2007 report, both Kenyan and Colombian flower farm workers earned only half of what was required to cover basic expenses. There are also, in many cases, serious problems with the working conditions. Often, jobs are seasonal and insecure, and even permanent workers have to accept long working hours as well as a constant exposure to pesticides and many other chemicals detrimental to their health. Several studies reveal that most flower workers do not get appropriate training on how to handle pesticides and are completely unaware of the possible dangers of working with such materials.

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**Cut flowers
are
cultural
symbols.**

Flowers developed their language across time and cultures. In one form or another, they have been a core element of human culture throughout. Sometimes they have a widespread meaning accepted across cultures (e.g. the red rose as a symbol of love and passion). In other cases, however, we see completely different interpretations. For example, the red tulip stands for fame for the Japanese but represents eternal love in western societies. Thanks to their symbolic meaning as well as their beauty and decorativeness, few celebrations and feasts pass without them. They are connected to the major events of our lives (birth, marriage, death) but are also a definitional element of some modern celebrations, such as Mother's Day, Woman's Day and Valentine's Day.

The background of the entire page is an abstract composition of overlapping, organic shapes in various shades of red and pink. These shapes are layered over a white background that features a dense, black, stippled or halftone pattern. The overall effect is a complex, textured visual field.

Orsolya Földesi

Flower Project

**Cut
flowers—**

**Orna
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Com—
modity?**

How do you see cut flowers? Are they ornaments, commodities or an environmental disaster to you? Or maybe something completely different? Perspectives and interpretations are abundant, although this exhibition explores only a few of them.

Nevertheless, these can help you understand more about the ornaments you decorate your home with and the systems behind them. For example, if you are aware of the environmental and human rights issues underlying the floriculture industry, you might come to the decision to buy locally grown, seasonal cut flowers, so that you can reduce your environmental footprint and also contribute to a more sustainable system which is not based on the exploitation of workers. The more perspectives you consider and the more information you collect, the better you can see the consequences of your choices and the more responsible your decision will be. All in all, well-informed, conscious choices on an individual level help us collectively produce a significant positive impact on both the environment and society.

Sources – Cut flowers are an environmental disaster.

1. Dinham, B. (2008). Flowers – a tale of beauty and the beast. Pesticides News 82. Retrieved on 03.07.2016 from <http://www.pan-uk.org/archive/PDFs/Flowers.pdf>
2. Fallon, R. (2016). The World's Biggest Flower Market – BBC Documentary 2016. BBC. Retrieved on 08.06.2016 from <https://www.youtube.com/watch?v=Ck4WdW6M0b4>
3. Hostalery, I. (2011) D'où viennent nos fleurs - C'est pas sorcier. France 3. Retrieved on 10.06.2016 from <https://www.youtube.com/watch?v=46B28dKwo58>
4. Mekonnen, M.M., Hoekstra, A.Y. and Becht, R. (2010). Mitigating the water footprint of export cut flowers from the Lake Naivasha Basin, Kenya. Value of Water. Research Report Series No. 45. UNESCO-IHE. Institute for Water Education. Retrieved on 07.07.2016 from http://waterfootprint.org/media/downloads/Report45-WaterFootprint-Flowers-Kenya_1.pdf
5. Royal Flora Holland. (2015). Annual Report 2015 – Facts and Figures. Retrieved on 10.06.2016 from https://www.royalfloraholland.com/media/5685262/RoyalFloraHolland_Annual_Report_2015_ENG_facts_and_figures.pdf
6. Ogodo, O. & Vidal, J. (2007). Drained of life. The Guardian. Retrieved on 10.06.2016 from <https://www.theguardian.com/society/2007/feb/14/kenya.conservation>
7. Vringer, K. & Blok, K. (2000). The energy requirement of cut flowers and consumer options to reduce it. Resources Conservation and Recycling: January, 2000. Retrieved on 01.07.2016 from https://www.researchgate.net/profile/Kornelis_Blok/publication/263696068_The_energy_requirement_of_cut_flowers_and_consumer_options_to_reduce_it/links/0c960521b09a957b79000000.pdf

Sources – Cut flowers are a commodity.

1. CBI Ministry of Foreign Affairs. (2015). CBI Market channels and segments: Cut Flowers. CBI Market Intelligence. Retrieved on 10.06.2016 from <https://www.cbi.eu/sites/default/files/channels-segments-europe-cut-flowers.pdf>
2. Fallon, R. (2016). The World's Biggest Flower Market – BBC Documentary 2016. BBC. Retrieved on 28.05.2016 from <https://www.youtube.com/watch?v=Ck4WdW6M0b4>
3. Hostalery, I. (2011) D'où viennent nos fleurs - C'est pas sorcier. France 3. Retrieved on 10.06.2016 from <https://www.youtube.com/watch?v=46B28dKwo58>
4. Royal Flora Holland. (2014). Annual Report 2014 – Facts and Figures. Retrieved on 10.06.2016 from https://www.royalfloraholland.com/media/4213130/floraholland_Kengetallen_2014_Engels.pdf
5. Royal Flora Holland. (2015). Annual Report 2015 – Facts and Figures. Retrieved on 10.06.2016 from https://www.royalfloraholland.com/media/5685262/RoyalFloraHolland_Annual_Report_2015_ENG_facts_and_figures.pdf
6. Schuetze, C. F. (2014). Dutch Flower Auction, Long Industry's Heart, Is Facing Competition. Retrieved on 03.07.2016 from http://www.nytimes.com/2014/12/17/world/europe/dutch-flower-auction-long-industrys-heart-is-facing-competition-.html?_r=2

Sources – Cut flowers are world travelers.

1. CBI Ministry of Foreign Affairs. (2016). CBI Trade Statistics: Cut Flowers and Foliage. CBI Market Intelligence. Retrieved on 03.07.2016 from <https://www.cbi.eu/sites/default/files/trade-statistics-cut-flowers-foliage-2016.pdf>
2. Fallon, R. (2016). The World's Biggest Flower Market – BBC Documentary 2016. BBC. Retrieved on 28.05.2016 from <https://www.youtube.com/watch?v=Ck4WdW6M0b4>
3. Hanks, G. (2015). A review of production statistics for the cut flower and foliage sector 2015. AHDB Horticulture. The National Cut Flower Center. Retrieved on 10.07.2016 from http://horticulture.ahdb.org.uk/sites/default/files/u3089/A%20review%20of%20cut-flower%20and%20foliage%20production%20statistics%202015_0.pdf
4. Hostalery, I. (2011) D'où viennent nos fleurs - C'est pas sorcier. France 3. Retrieved on 10.06.2016 from <https://www.youtube.com/watch?v=46B28dKwo58>
5. Rikken, M. (2010). The European Market for Fair and Sustainable Flowers and Plants. Retrieved on 03.07.2016 from http://www.befair.be/sites/default/files/all-files/brochure/The%20European%20Market%20for%20Fair%20and%20Sustainable%20Flowers%20and%20Plants_1.pdf
6. Worldatlas. (2016). Global Leaders In Cut Flower Exports. Retrieved on 10.06.2016 from <http://www.worldatlas.com/articles/global-leaders-in-cut-flower-exports.html>

Sources – Cut flowers are ornaments.

1. Berrall, J.S. (n.a.). Floral decoration. Encyclopædia Britannica. Retrieved on 28.05.2016 from <https://www.britannica.com/art/floral-decoration/Historical-and-stylistic-developments#toc73815>

Sources – Cut flowers are a job opportunity.

1. Dinham, B. (2008). Flowers – a tale of beauty and the beast. Pesticides News 82. Retrieved on 03.07.2016 from <http://www.pan-uk.org/archive/PDFs/Flowers.pdf>
2. Fallon, R. (2016). The World's Biggest Flower Market – BBC Documentary 2016. BBC. Retrieved on 08.06.2016 from <https://www.youtube.com/watch?v=Ck4WdW6M0b4>
3. Royal Flora Holland. (2014). Annual Report 2014 – Facts and Figures. Retrieved on 10.06.2016 from https://www.royalfloraholland.com/media/4213130/floraholland_Kengetallen_2014_Engels.pdf
4. Veselinovic, M. (2015). Got roses this Valentine's Day? They probably came from Kenya. Retrieved on 03.07.2016 from <http://edition.cnn.com/2015/03/16/africa/kenya-flower-industry/>
5. Worldometers. (2016). Kenya Population. Retrieved on 03.07.2016 from <http://www.worldometers.info/world-population/kenya-population/>

Sources – Cut flowers are cultural symbols.

1. Berrall, J.S. (n.a.). Floral decoration. Encyclopædia Britannica. Retrieved on 28.05.2016 from <https://www.britannica.com/art/floral-decoration/Historical-and-stylistic-developments#toc73815>
2. Flower Meaning. (2016). Flowers and their meanings. Flower Meaning. Retrieved on 05.07.2016 from <http://www.flowermeaning.com>
3. Kelly, A.G. (2016). Discover the Meaning Behind 10 Popular Valentine's Day Flowers. Woman's Day. Retrieved on 05.07.2016 from <http://www.womansday.com/relationships/dating-marriage/g744/flower-meanings/>
4. Spacey, J. (2009). 17 Japanese Flower Meanings. Japan Talk. Retrieved on 15.07.2016 from <http://www.japan-talk.com/jt/new/17-Japanese-flower-meanings>
5. The Old Farmer's Almanac. (n.a.). Flower Meanings: Language of Flowers. Symbolism of Flowers, Herbs and Trees. Retrieved on 05.07.2016 from <http://www.almanac.com/content/flower-meanings-language-flowers>

Sources – Posters and logos.

1. Graphic design by Dalma Földesi. All posters are courtesy of Dalma Földesi.
2. Logo – Environmental Studies Certificate Program. Retrieved on 18.07.2016 from http://www.carsoncenter.uni-muenchen.de/bilder/logos/es_certificate_logo.png
3. Logo – Rachel Carson Center for Environment and Society. Retrieved on 18.07.2016 from http://www.amerika-akademie.de/php/uploads/Logo_Rachel_Carson_Center.jpg