

English translation

To my esteemed solar cooking colleagues, who like me have been ‘infected’ by this amazing technology:

Solar cookers and concentrators have been around for a long time—even before Da Vinci’s three concentric glass cubes. We all know that using the sun to burn, melt and even cook goes back many centuries. The industrial revolution gave us new materials and new types of energy, all of which made the daily act of cooking something increasingly easy for those with money and access to new devices and sources of energy.

During the early years of the industrial revolution, more than half the people on our planet didn’t even know about gas, oil, coal or electricity. They continued to cook with wood from local forests. Today, earth’s population is approaching eight billion and yet there are still more than two billion people, who do not have access to modern or clean sources of energy—especially in Asia, Africa and Latin America.

Natural gas (LPG), kerosene and electricity currently have one huge advantage, that is difficult to match. They provide a form of energy that can be stored and used when needed, even when there’s no sun. Firewood, which like fossil fuels also produces CO₂ and damages natural resources, has the same advantage—energy storage.

The lack of energy storage is one of the answers to the question those of us "infected" by the virus of solar cooking keep asking. Why, despite our fantastic inventions, are there not

hundreds of millions of solar cookers in the hands of hundreds of millions of happy cooks? The models we have designed so far cannot store energy to allow cooking at night or when it's cloudy. Also—and this is important—current solar cookers can't provide the four classic burners found in a modern, domestic kitchen (each burner with over 1,000 watts of power). They also can't compete with a large built-in oven, where one can roast a turkey for ten people in a few hours.

Finally, for poor people in developing countries, being able to heat water for coffee or tea in the morning or cook an evening meal without firewood remains a huge challenge

There is another reason for our failure to spread solar cooking technology. We face political and economic barriers. The global owners of oil, coal and gas corporations and the multi-national munitions dealers are earning hundreds of billions of dollars every year by supplying weapons and fuel for the thirty-two wars of medium and low intensity that persist even today. Many of these wars are being fought to defend access to oil and gas needed to support a neoliberal market economy.

This is hindering efforts to develop and mass produce replacement technologies that use clean, renewable energy. A well-made solar cooker doesn't have the built-in obsolescence typical of computers, vehicles and appliances since the only energy it consumes is solar radiation which is free and accessible to every human on earth. A device that can cook, needs few repairs, lasts for years and doesn't consume fuel is not the type of profit-making product required to support a market-based economy based on continuous growth. This is a simple but dramatic truth.

There are other reasons for the failure of those of us who are "infected" to spread interest in solar cooking technology. Many of us solar 'infected' individuals try to spread our 'infection' by demonstrating solar cookers at fairs and other community events. Out of a hundred people, we may 'infect' two or three or none. The others even though mildly interested, carry on with their consumer-based way of life, since they realize that the technology they saw working brilliantly, does not comfortably solve ALL of their needs. Why are we unable to 'infect' these people when we know that solar cookers are a useful tool—when there is sunshine—for everyday cooking.

Another issue (and here I apologize to my readers for this literary but blunt approach) is those I call "the Martians". These are people who arrive in developing countries from "far-far away" in fast and comfortable jets, which consume the energy equivalent to an entire forest during their travel; stay in hotels or residences arranged online and paid for with credit cards; and climb out of their leased Land Rovers with piles of 'magic' solar cookers for the locals without a hint of cultural sensitivity.

These individuals do not worry about speaking the local language (which is unforgivable). They distribute dozens, hundreds or thousands of untested devices free of charge, with no real efforts at cultural transfer. Some use 'found' materials to make their solar cooking devices. After a few weeks, when the 'flying saucer' leaves, the solar cookers are used as umbrellas, storage boxes, or fuel for cooking fires.

I know this description makes us uncomfortable, but I can state from my own experience as a "Martian", that developing projects in which the number of solar cookers distributed (rather than long-term results) made my anxious European funders happy.

These are organizations and individuals that I personally and sincerely convinced that I was saving the world from global warming, improving the health of hundreds of women, freeing thousands of children from child labor, saving tons of forests, fighting against climate change and delivering energy justice to the most dispossessed. My claims were verified by TV reports, YouTube videos and photos.

All of this brings us back CONSOLFOOD—an honest and nuanced gathering, where we demonstrate every two years, different versions of the same model of solar cookers. We make presentations on our successes. We exchange information. We make new friends. We infect a few more people with our passion for solar cookers and we ask ourselves the same questions. Where are we going, and why—despite our incredible inventions, are there not hundreds of millions of durable, affordable and beautiful solar cookers in the hands of hundreds of millions of happy cooks?

I have suggested various reasons in this essay. To increase genuine understanding and passion for this technology, I believe (although I may be mistaken) that we need new approaches. We must not repeat the same errors over and over. This is our challenge for the next two years. We must understand that with solar cookers, the object is great food, not cooking technology.

Rather than insist on measuring the temperature of the thermometer exposed to the sun inside the equipment, we should understand that what matters is the transfer of the heat to the food, culturally appropriate cooking times and the intensity and LOVE with which the cooking is done. Food has incredible cultural variations on our planet. It is primarily a socio-cultural issue that includes ingredients and customs, health and lastly technology.

We are all focused on the ultimate goal- to cook with clean renewable solar energy. We know it works. We know it takes longer than 'modern' cooking devices. We acknowledge that it is cumbersome, but we know that it works—and that's what 'infects' us.

We have tried by all means available to transfer this technology and we acknowledge that we are only able to infect a few people each time we try. Since I started my own solar cooking campaign more than 40 years ago, you may consider this a self-criticism.

Our efforts to penetrate the international system (NGOs, communities, universities, churches, etc.), with the tools provided by that same "system", require that we incorporate knowledge from many sectors: anthropology, industrial design, sociology, social work, philosophy, law, technology, food chemistry, ecotourism, gastronomy, medicine, nutrition, marketing technicians, advertising, cinema, etc.

With a higher level of input, we can complement the always necessary inventions, adaptations and innovations that we like so much. With a new level of input, we can infect more people and groups with our passion for a cooking device that is clean,

environmentally sustainable and socially appropriate. These are ideas that may be partial solutions or complementary solutions but they still do not solve the underlying question.

For this reason, we should always have more questions than answers.

Pedro Serrano Rodriguez

Chilean.

Infected and contagious

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