

Design livre at Corais Platform: an experience in cultivating a design commons with free software

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Corais (Portuguese word for "coral reefs" and "choirs") is an online platform for organizing projects with collaborative tools such as blog, text processing, task management, social credits, spreadsheets, polls, wiki and videoconference¹. These tools were developed using Drupal, a free software content management system, tailored to enable the appropriation of open design practices in Brazil.

Currently, the platform hosts 162 public projects, ranging from grassroots living labs to public standards definition. These projects are run by communities such as social movements, cultural producers, governmental agencies, and educational institutions. They seek in Corais the infrastructure necessary to organize work in geographically distributed settings, a common challenge in Brazil, a country of continental proportions, intense migration, and poor transport infrastructure.

Corais Platform was launched in 2011 by Faber-Ludens Institute for Interaction Design. At that time, this institution was one of the pioneers in bringing the digital culture national policy to design education and practice in Brazil. Its distinct characteristic was that all student projects were developed publicly and licensed under Creative Commons, whenever the students involved agreed with that.

Students used commercial collaborative tools such as Google Docs and later shared their finalized documentation using Drupal content management system. This practice was named *design livre*², following the Brazilian translation of free software to *software livre*. The emphasis was to share not only source codes, but also the underlying design process, going beyond what is emphasized by terms such as open source or open design.

Corais was developed with the aim to encourage *design livre* in other institutions, not necessarily connected to Faber-Ludens. A more advanced distribution of Drupal was used: Open Atrium, supporting not only sharing documentation, but actually producing it. Open Atrium made proprietary software Google Docs unnecessary, with the advantage of being public even without a login.

Corais was meant to be the "Github of design", in analogy to the popular collaborative computer programming platform³. The main challenge was to find the "code" to be shared, since there was no widely

¹ Corais Platform <http://www.corais.org>

² We prefer not to translate *design livre* to "free design" in order to avoid the "free as in free beer" meaning of the word.

³ Github <http://www.github.com>

accepted formalized way of describing design. Instead of defining a code and imposing on hosted projects, Corais offered infrastructure for every project to gradually define its own "code" to share. It was expected that the diverse contributions in the project would follow a certain design code at some point, even if ill-structured and tacit. The absence of a pre-defined code would also allow unexpected communities to bring their existing codes to the platform instead of requiring them to learn a new code to collaborate with a project.

Notwithstanding, the usefulness of open ill-structured code is limited, since it is not possible to easily "copy and paste" to another system. Despite that, Faber-Ludens students found great advantage in tracking their colleagues' projects, highlighting the mediation of learning in ill-structured design code: even if not directly replicable, a very contextualized design code can help learning to deal with very contextualized situations, a typical challenge to design practitioners.

One of the difficulties experienced by Faber-Ludens' students was to know when to apply a particular method from the pool of interaction design practices. Since methods play an important role in legitimating this design branch among others (Lee, 2012), Faber-Ludens developed a deck of method cards integrated with Corais Platform: UXCards⁴. Each card has a corresponding wiki page in Corais, where students can link their profile to the method as learner, experienced user, or expert. The cards are structured with inputs and outputs showing the possible connections between methods in a design process. Whenever the card is used in a project developed using Corais, a link to the project is shown in the card page, allowing for learning about specific applications of the method (Figure 1).

The screenshot displays the Corais Platform interface for the 'Card-sorting' method. The top navigation bar includes 'Panel', 'Tree of Knowledge', and a search function. Below the navigation, there are tabs for 'See', 'Experts', and 'Relations'. The main content area is divided into several sections:

- Knowledge Card:** A section titled 'The Tree of Knowledge works as a Wiki. If you want to add or correct some information, use the top flaps. You must be logged in to participate.' It features a 'Knowledge' sidebar with categories like Communication, Creating Writing, Design Documents, Design Tools, Games Design, Product Licensing, Methods Design, PEDAGOGY, Video Production, Design Techniques, and Toolkits Design.
- Card-sorting:** The main content area, titled 'Card-sorting', includes a 'PROJECT PHASES: Evaluation' section with a search button. It contains text explaining the technique: 'The card-sorting is a technique used to discover how the user classifies certain information in your mind.' It also discusses classification and taxonomy, stating 'The classification used in the website should be similar to what the user has chosen, otherwise it will not make sense to him. If he uses the term "teacher" to define the professional who teaches, better not to use "teachers".' and 'The page rank of a website is called taxonomy. It can serve both a navigation menu, and for a search system, why it is so important to involve users in its development. Try to guess how the user is ranked something like shooting in the dark. The card-sorting is light.' A final note says 'The user receives a series of cards describing content that will be available on the website and relates them to label cards, forming categories.'
- Contributed to this knowledge:** A section showing a list of users who have contributed to this knowledge, including 'fred'.
- Community:** A section with a 'Studying' toggle and a list of users: Daniel Ferreira, vsarmento, Joopra, marcosdocanto, and 'Used:' section with users jelfar, filipepoletto, guida_oe, and rfrota.
- Relations:** A section titled 'Knowledge mentioned 30 times on projects' showing a list of projects where 'Card-Sorting' was used, such as 'Taxonomy chosen to be checked with closed card-sorting: About Us Adopt a Dog Dog News' and 'Started brainstorming on: http://corais.org/lacridas/node/52790'.

Figure 1 - Method page description with links to projects using it in Corais Platform

Corais was developed with the intention to facilitate learning design while doing it in teams, even if not physically collocated. Learners have the opportunity to design their own design process by combining the

⁴ UXCards <http://www.uxcards.org/> and <http://www.corais.org/knowledge>

design knowledge shared by other projects. When a project stops by any reason, it can still contribute to future projects by leaving traces of their emergent structures. Since those structures are licensed under Creative Commons, cultural cannibalism is not prohibited. Actually, like in real coral reefs, cannibalism is encouraged to dead structures, which becomes the base for new structures. Corais can be conceived as an ecosystem that adopts an evolutionary development process, where collaboration — and not competition — selects the best structure available.

The discussion about *design livre* and the development of Corais are documented in a book written by 12 persons in one week using that same platform (Faber-Ludens, 2012), and in a more traditional academic paper from a design education conference (Amstel, Vassão, & Ferraz, 2011).

Since 2012, Corais Platform has expanded its scope beyond creating a commons for interaction design. Faber-Ludens changed its strategy away from open innovation and Corais Platform became an independent project. About same time, communities that have apparently nothing to do with design begun to use the platform, finding new uses for it, complaining about its shortcomings, and suggesting new features.

In particular, the community of cultural producers became very involved in Corais development. Since 2010, this community was struggling with organizing themselves without governmental support, which was plenty during Gilberto Gil's lead of Brazilian's Ministry of Culture. Gilberto Gil, who is also a pioneer in using Creative Commons to license artistic works, envisioned a network of organized producers working with free software, but not every group pursued the vision. Once his term was over and governmental support run out, these groups did not have money to pay the technological and spatial costs to organize. This financial problem led some cultural producers in northeast of Brazil to develop an organizing model called *collaborative cultural producer*, based on free software, self-management, cooperativism, and heterarchy (Jatobá & Vilutis, 2010), but they could not implement it properly using commercial collaborative tools such as Google Drive and Dropbox.

Corais Platform was seen by Collaborative Cultural Producers as a virtual space to organize. They used the tools designed to support design to arrange their nomadic meetings, keep up with each other's individual work, divide tasks, write together funding proposals, among other activities.

An interesting innovation occurred when the producer Colaborativ@.PE was trying to use the spreadsheet tool to organize a Local Exchange Trading System (LETS) based on an alternative currency. The limitation of the spreadsheets led them to suggest a new tool in the platform for LETS, which they designed together with the developers based on the customization of available Drupal modules. Soon after its launch, the tool was used by another producer, a theater school which wanted to engage students in maintenance activities. This school is relying in this economic system for more than a year, with an average of 60 exchanges per month.

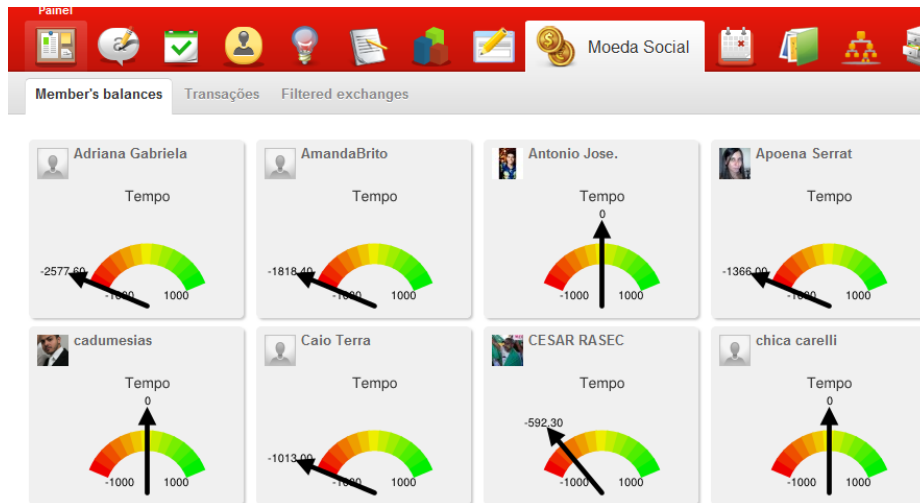


Figure 2 - Financial health indicators of a Local Exchange Trading System in Corais Platform

The occupation of the platform by cultural producers and the consequent development of the social credit tool made its developers to rethink their vision of the commons tied to knowledge sharing. Knowledge is indeed one possible commons, but its production depends on other commons that are not necessarily cultivated with knowledge sharing: virtual and physical spaces, social capital, institutions, and others. The proper infrastructure for these commons are not necessarily the same for knowledge sharing, as failed experiments of using wikis to organize people can attest.

The sustainability of interactions, such as the biomimetic reuse of dead structures, seems to be an interesting frontier to be explored in further development. The participation of cultural producers in the development of the platform suggests that if the infrastructure of the commons is also part of the commons, or in other words, if the infrastructure can be managed in the same way as the commons, the commons itself might become more sustainable.

Free software — not just open source — and participatory design are practical ways of enabling such level of management in digital infrastructures. There is still a lot to do in developing sustainable infrastructure for the commons. Corais platform and the *Design Livre* book are already translated into Spanish, thanks to El Salvador's Red de Colectivos Maniobras Colectivas. The platform and the book are slowly being translated into English, and a new Drupal distribution forked from Open Atrium may follow.

The contribution of a “designerly way of organizing” — which might be more relevant to a design commons than a particular way of knowing (Cross, 2001) — still needs to be investigated, together with the many different ways of organizing that clashes or merge in platforms such as Corais.

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