



# **prototypes**

**The distribution of financial resources  
in open source projects**



## Standing on the shoulders of giants



Open source is the cooperative, open and global demonstration of technology combined with knowledge transfer and proof.

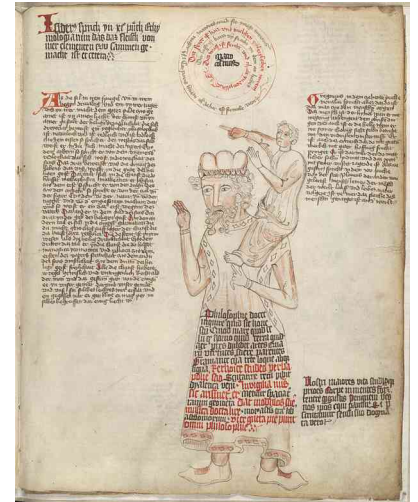
The scientific consensus on which our prosperity is built upon, uses the same principle.

*"Knowledge is a collective tradition"*

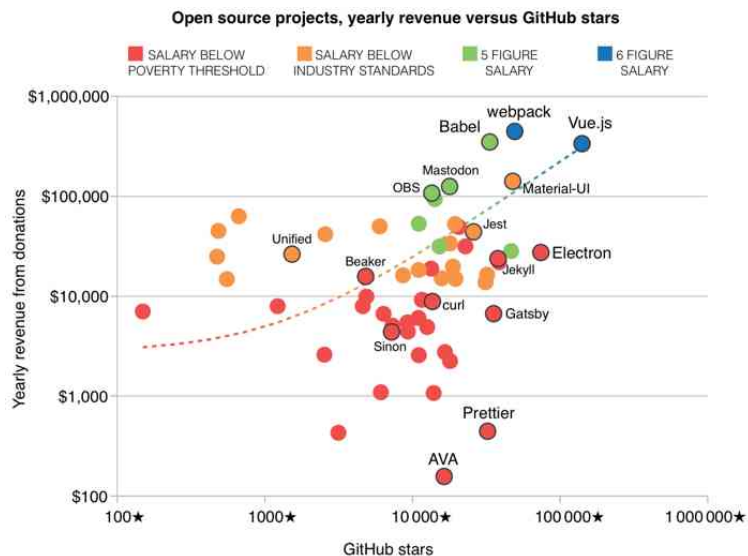
**- Vandana Shiva**

*"If I have seen further it is by standing on the shoulders of Giants."*

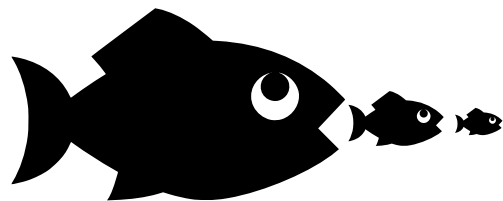
**- Isaac Newton**



# Distribution Problem in Open Source



Source: GitHub and OpenCollective web pages on June 11th 2019.  
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Open Source is a billion dollar business. [1]  
Around 70% of the code base in software product is today open source. [2]

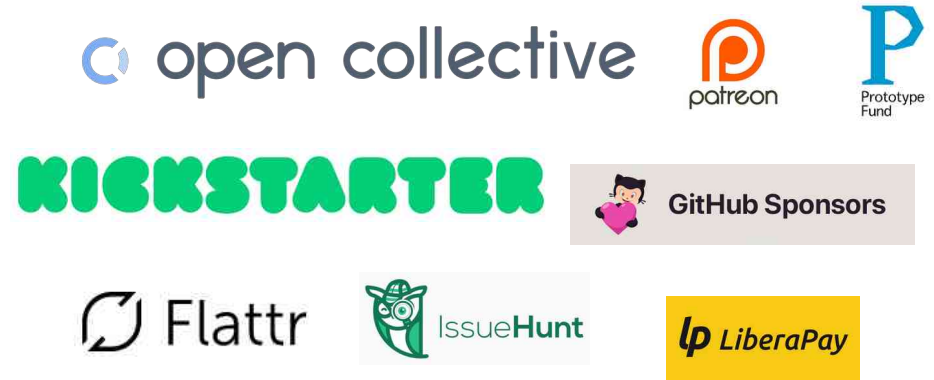
Profit from open source creates a distribution problem between product developers and the open source community:

- "Food chain of open source", where the product-producing company takes all the profit. Dependencies are usually not included in the profit.
- Donations and funds are only distributed to individuals. The rest of the community usually goes away empty-handed.
- Platforms such as Github threaten the freedom of open source users by trapping them on the platform. Changing the platform without losing all "sponsors" get impossible

# Tools vs. Platform



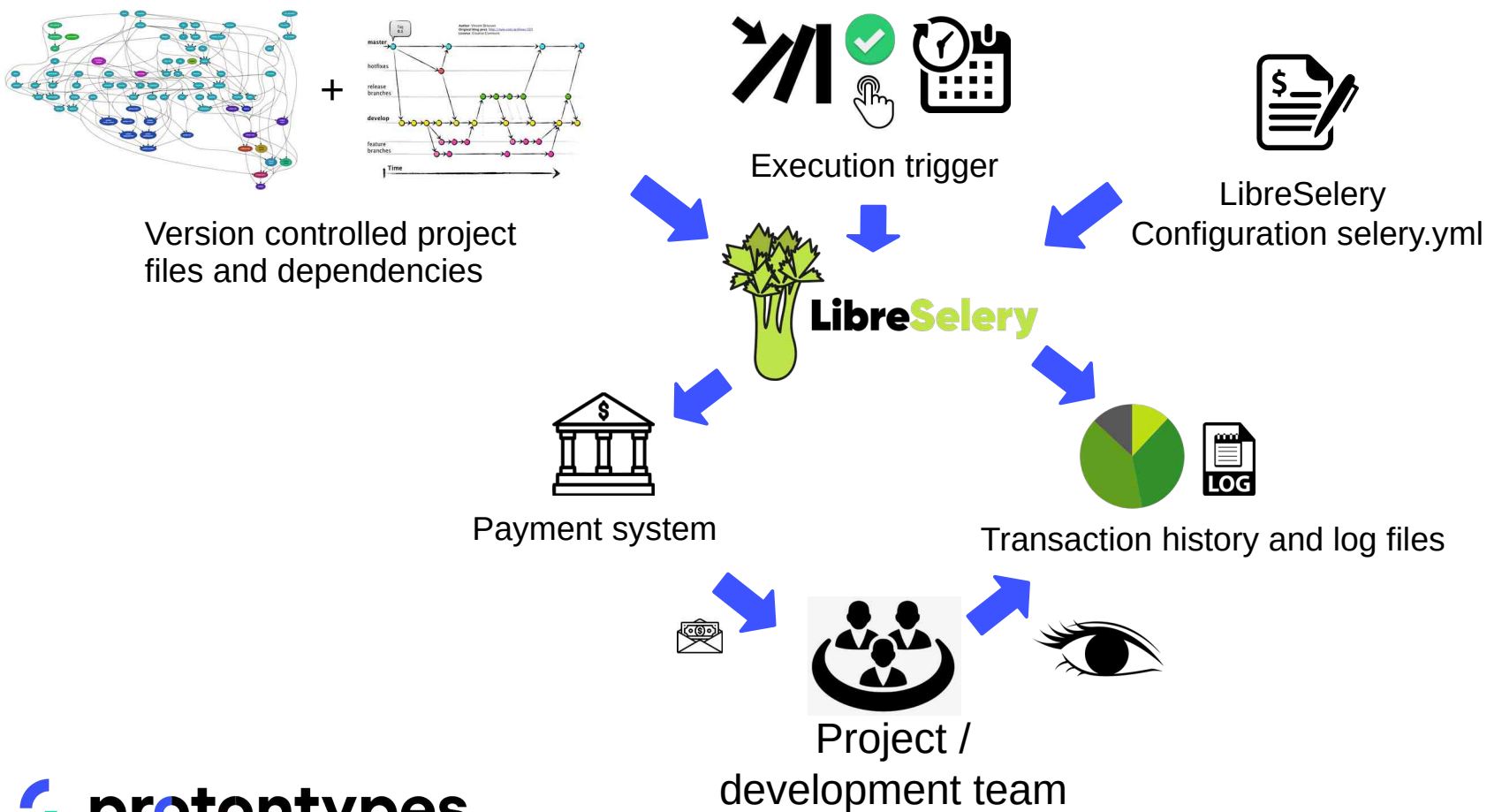
- Decentralised approach
- Use requires more knowledge
- User is empowered
- Full transparency
- Low fees
- Dependent projects are included in the financing
- Community can determine integration, design and function.
- No Vendor lock-in



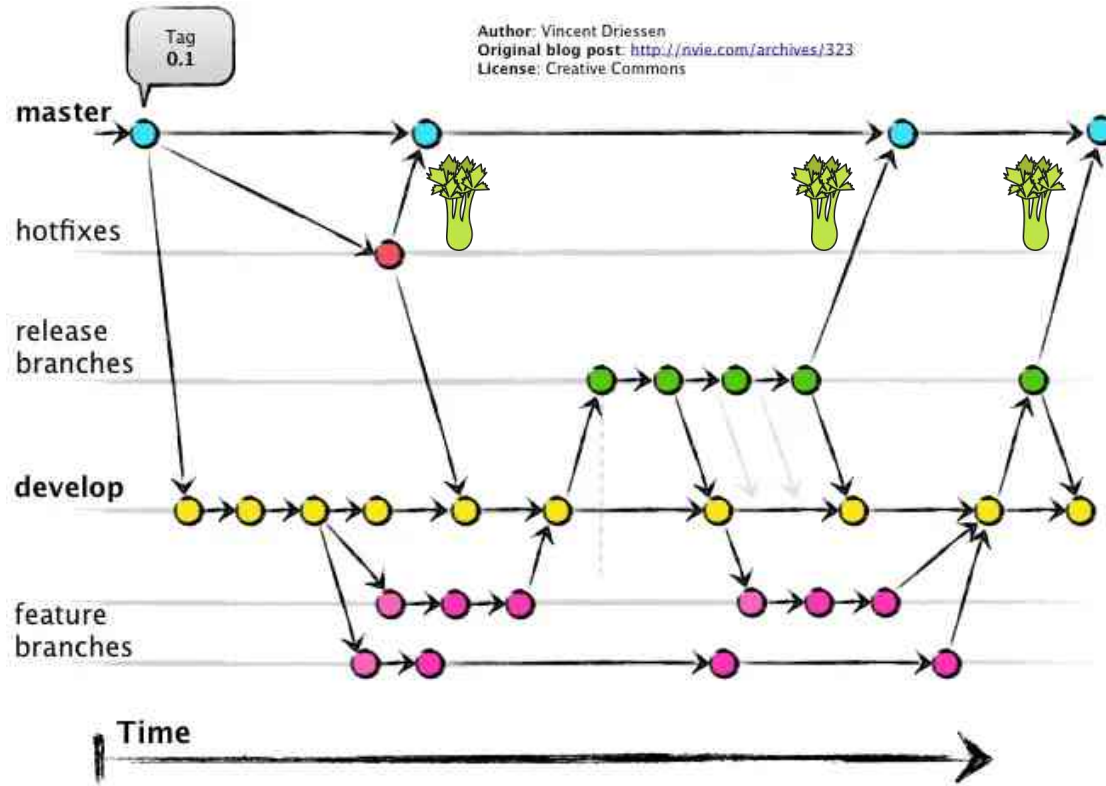
- Centralised approach
- Very simple to use
- User / community has no influence on integration, design or function
- Intransparent for the user
- High fees
- Vendor lock-in



# Distribution through a Transparent Algorithm



# Running LibreSelry in Continuous Integration

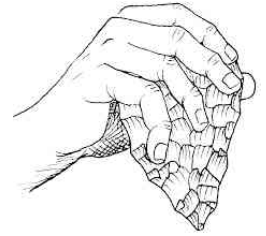


- Payout is executed in a complete transparent and public way
- Can be integrated into different Git and CI/CD platforms.
- Tokens of payout methods are stored in a safe way.
- Abuse of the system is visible for everyone.

# The Power of Free Tools

LibreSelery is a tool and thus allows creative applications, platforms, services and products to be built on top of it. Here are some examples:

- One-time or recurring personal donation to any open source project.
- Distribution of salaries within companies through a monthly trigger.
- Automated distribution of collected donations and profits using Continuous Integration within open source projects.
- Building open, transparent and automated investment funds.
- Companies create a list of open source projects they use and distribute money to them.
- Project managers describe a project with work packages, tests and goals and let the open source community work for them.



[1]

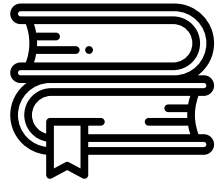
# Integration of the Project Dependencies



Project  
Repository

setup.py  
Gemfile

...



Bibliothecary

<https://github.com/librariesio/bibliothecary>

package platform  
+ project name

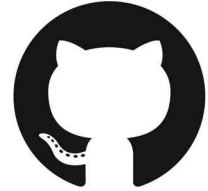


Libraries.io API  
via Pybraries

<https://github.com/pybraries/pybraries>



Project URL



Github API via  
PyGithub

<https://github.com/PyGithub/PyGithub>

Contributer Name  
+ Email



# Lessons Learned

Feedback from projects like GNU or Debian:

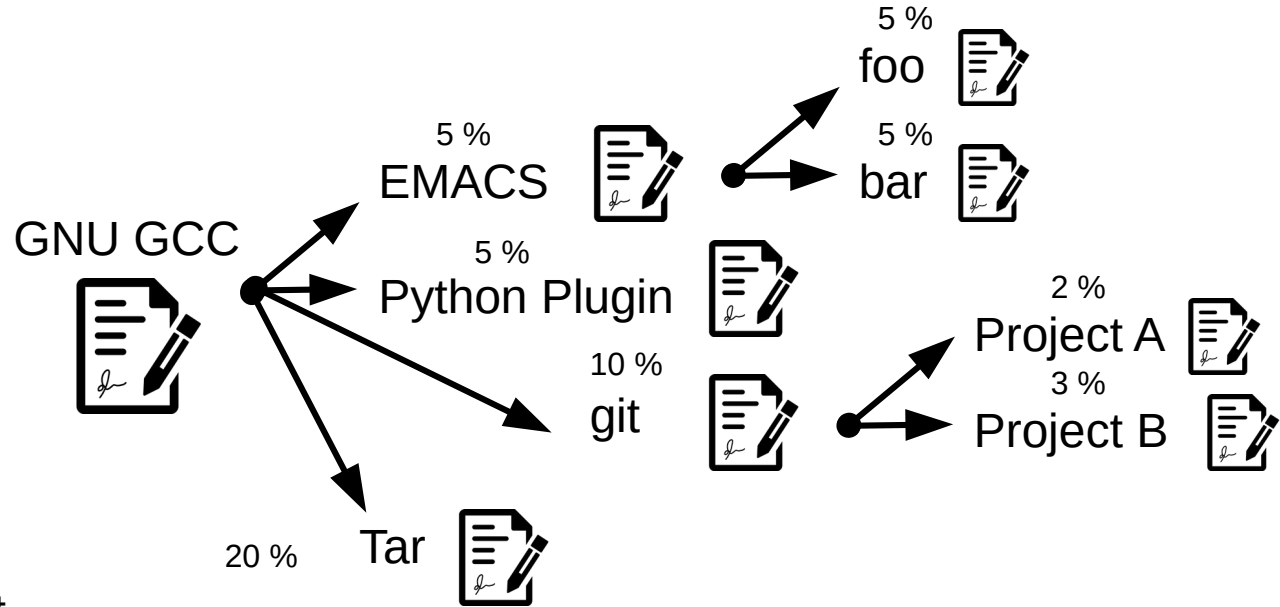
- Only programming languages with packing systems like Python can be integrated. Other languages like C++ cannot be scanned for dependencies. Dependencies need to be manually declared.
- The individual projects should decide how to distribute the funding. They cannot decide how to distribute the funds among the dependent contributors.
- Each project should be able to create their own plugin / metric on how to measure contribution.
- Bitcoin is not a good payment method: Not stable value and very high energy demand that make the global usage as payment method impossible. Many people also don't trust Bitcoin related projects as Bitcoin is used for many fraud use-cases.
- Contributors should have an op-in option, rather than opt-out for receiving emails. The email scanning and sending could be considered as spam.
- LibreSelery is like a bank. It describes a system for distributing money between parties. Since nobody knows the contributors to LibreSelery, most people do not trust our software solution.
- Distribution between dependencies and projects contributors should be separated into two different projects / tools.

# Contribution Credit Standard

Each project self-declares how the funds within the project are distributed.



Project “wallet” address:  
Dependencies URL:  
Weights to distribute between  
dependencies and main project.



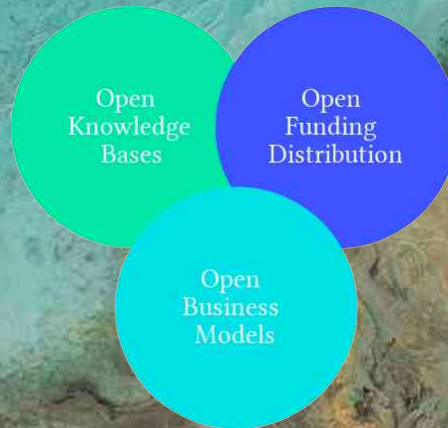
Proposed by Jose E. Marchesi of GNU:

<https://github.com/protontypes/LibreSelery/issues/189#issuecomment-717203735>



# prototypes

**An independent and non-profit organisation that supports sustainable research and business development based on free and open technology.**



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