

Timeline Construction Process as Systematization Instrument of Experiences in Solidarity Economy. Multidisciplinar and Integrated Core of Studies , Formation and Intervention in Solidarity Economy – Federal University of São Carlos – UFSCar – São Paulo – Brazil

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1. Systematization as an educational and knowledge production principle in the Solidarity Economy

There are different understandings, theoretical approaches and several Solidarity Economy experiences in progress. This has increasingly reached visibility between workers, academic studies and public policy, especially in Brazil. An example of this increase is verifiable by researching the term "solidarity economy" on the bank of thesis and dissertations of the Coordination for Higher Level Graduates Improvement of the Brazilian Ministry of Education (CAPES/MEC). In 1998 there was only a thesis on the subject and any dissertation, but in 2010 were 401 thesis and dissertations. (OLIVEIRA, 2012)

The Solidarity Economy is constituted as a social movement that has been strengthened over the past 20 years through popular organization that brings together diverse social actors, which can be classified as: solidary economic ventures (SEVs), public managers and supporting and fostering entities. (CORTEGOSO and SHIMBO, 2005)

Among public managers in the federal exists the National Secretariat for Solidarity Economy of the Brazilian Ministry of Labor and Employment (SENAES/MTE), which aims to promote various activities in support of Solidarity Economy across the nation. The state and municipal spheres have sectors, departments or even secretariats, however each location depending of the political project and the importance given to Solidarity Economy in each region.

The supporting and fostering entities are nonprofit civil organizations that fund research or fund SEVs, beyond the Universities that have its exponent in fostering at the Technological Incubators of Popular Cooperatives (TIPCs). There are the articulators in Solidarity Economy consisting of university networks of TIPCs, Solidarity Economy and related topics research groups, central cooperative, marketing networks, Solidarity Economy fairs and forums. (CORTEGOSO and SHIMBO, 2005)

There are various types of SEVs: work cooperatives that can be of production or services (cooperatives are the main form of SEVs), informal collectives and associations that do not necessarily maintain commercial relations and a large amount of other forms of SEV and Solidarity Economy initiatives as

"(...) Solidary consumption cooperatives, organizations and groups of solidary credit, community banks, revolving funds and credit cooperatives, ventures networks, producers and consumers, groups and clubs of solidary exchange, solidarity exchanges markets with or without use of social currency; recuperated enterprises by workers in self-management, solidarity productions, marketing and consumption chains, central marketing, fair trade initiatives, economic organization of traditional communities (quilombolas, black communities and yards of African origin, indigenous, riverine, tappers, fishermen, craft and other extractive, among others), self-managed housing cooperatives; cultural groups; family agribusinesses , among other initiatives, whether in urban or rural areas, respecting the gender issue, race, ethnicity and generation". (GOMES et al, 2002)

In the Solidarity Economy literature it's possible to find description of its principles and fundamental values as self-management, solidarity, cooperation, participation, democracy, respect for the environment, the pursuit of equality of gender relations, among others. (FERREIRA, 2010)

The principle of self-management assumes that workers in a venture have ownership of the means of production, have a democratic decision-making process, with the pursuit of the consensus and vote (one vote per person) when necessary, have more balanced division of labor, sharing of gains or losses, among others. GAIGER (2004a) points out that

"Collective ownership is not a basic assumption or a guarantee that there is similar involvement by individuals. The key seems to lie in the degree of cooperation, in the management and labor, even if it is supported in production goods and individualized partially economies". (GAIGER, 2004a)

The notion of self-management isn't new, frequents the literature about production organization and labor relations since the nineteenth century. She reappears in the early 1990s when there are a high number of bankruptcies and workers with no prospects for another job or receiving labor rights, take the physical structure of the company, continuing production.

Already the notion of cooperation opposes the notion of competition. By cooperating, workers group associate around common goals and stop competing. In the context of the production, cooperation is understood as

"A driving force of a new economic rationality, able to sustain the ventures through effective materials results and extra-economic gains. Empirical research have pointed out that cooperation in the management and labor, instead of countering the imperatives of efficiency, acts as a vector for streamlining the production process, with tangible effects and real advantages compared to individual work and competition, among salaried, induced by capitalist enterprise". (GAIGER, 2006)

As can be seen, as well as the cooperation, self-management ends inducing more egalitarian relations between workers who join. However, it is noteworthy that is necessary a mindset change by the workers who goes from employee to cooperate.

Solidarity is a concept that can be understood as more charitable bias, assuming the maintenance of the relationship between unequals, but in Solidarity Economy assumes symbolic and subjective means in opposition to "derogatory" term that recognizes people as equals and move to refer the idea of social co-dependency. (AMORIM, 2010)

The Solidarity Economy is contributing to a solidarity development mainly in Brazil. This development is characterized by the existence of communities of small firms associated or worker cooperatives. With above mentioned, these communities are driven by principles of cooperation between people or SEVs and collaborating not only to increase the life quality singly, but contribute to the development of the locality in which they live.

1.1 “Systematization” theme evolution in the Solidarity Economy movement

The Solidarity Economy movement has been debating the issue of systematization in a set of events such as Formation/Education National Workshops in Solidarity Economy, Nation Plenary of Solidarity Economy and also via Formation and Advisory Thematic Conference in Solidarity Economy (CTFAT) and Solidarity Economy Formation Center (CFES). National events including the contribution of state events that were contributed by local events.

These events occurred in the following order: 1st Formation/Education National Workshops in Solidarity Economy, between 26 and 28 October 2005; 2nd Formation/Education National Workshops in Solidarity Economy, between 16 and 18 April 2007; 4th Nation Plenary of Solidarity Economy, between 26 and 30 March 2008; CTFAT between 12 and 14 April 2010. The 1st National Conference of Solidarity Economy (CONAES), held between 26 and 29 June 2006, the 2nd CONAES, between 16 and 18 June 2010 and 5th PNES, from 09 to 13 December 2012, did not approached the systematization issue.

The 1st Formation/Education National Workshops in Solidarity Economy, approached the systematization issue as a central element, highlighting it throughout the entire event. At first, approached in two axis: formers formations in Solidarity Economy and formation experiences for

solidary economic ventures (SEVs). The published document from the completion of this workshop, which could be accessed, presents a list of topics related to each of these two axis. In both the theme of systematization is appointed. The formers formation axis was punctuated the importance of systematization of experiences together with the ventures, from register, organization and classification of information in the production chain. As formation experiences of SEVs, the importance of systematization and dissemination of knowledge constructed. In a second step, the participants organized themselves into workgroups around five themes, one of which was "Systematization and evaluation". Another theme, the "Principles of education / formation Solidarity Economy" asserts in relation to the systematization that

"... the persistence of this collective process that goes from registration, organization, classification of experiences and produced content, validation of practices, awareness of other actors and achievement of learning is the foundation for the construction of culture and history , in the words, a new sense of living in society."
(SENAES and FBES, 2006)

It is noticed that the systematization consists of several steps (registration, classification, validation and awareness etc.) and so it is desirable to be performed continuously. This process is educational for educators and workers and allows the (re) construction of social practices and means of working.

The workgroup "Systematization and evaluation", on this subject, presented "guiding principles" and "systematization methodology". The document published regarding this workshop presents in its Annex V: "Elements of Systematization Process", which served as preparatory material for discussion during the event. The main guideline that could be highlighted by the First National Workshop is that formers, coming from ventures or advising or public management, need to systematize their experiences.

In preparing to the 2nd National Workshop, from the 1st one, was published a document entitled "Principles and methodological guidelines for the training process in Solidarity Economy" that has been considered as an important reference in the movement of Solidarity Economy. This document was advancing and accumulating knowledge about the systematization of experiences. In relation to the accumulation of the First Workshop, this document presents over systematization, "goals ", "how to do" and "products systematization".

The 2nd Formation/Education National Workshops in Solidarity Economy, which occurred two years after the first, round to stick to the systematization theme. Among its methodological guidelines indicates that the systematization as an instrument, gives subsidy for criticism and self-criticism of experience. This workshop advancing on the theme of systematization, which are added "structuring guideline", "initial considerations", "systematization methodology" and "suggested references for product construction systematization and validation of the of educational material". The 4th Plenary only cites the systematization as an important tool in the socialization of produced knowledge to be included in the formative processes of Solidarity Economy.

The Formation and Advisory Thematic Conference in Solidarity Economy held in preparation for 2nd CONAES advances in relation to the systematization issue at propose experience systematization as one of the references to education in Economics Solidarity. State the systematization as a knowledge construction processes results and part of the formation process should be performed by / with people involved in the action. Then, presents a synthesis of the systematization objectives that culminated in a Public Policy: Recommendation No. 08, dated July 4, 2012 entitled " Methodological policies guidelines for education in Solidarity Economy".

The 5th Plenary, in relation to progress on the subject of systematization merely notes that the production of knowledge in Solidarity Economy is made from the floor of associated labor and, therefore, the experience systematization of collective work and self-management is the foundational methodology of this process for the self-management pedagogy, although it is necessary greater ownership of this methodology by workers.

1.2 Systematization as an educational and knowledge production principle

Palma cited Jara Holiday (2006) makes some basic findings on the subject of systematization of experiences. At first, actually there is a specific practice that deserves the name of "systematization". So, this can be differentiated by other way to deal with knowledge, such as research or evaluation. Another point is that the term systematization is used ambiguously by social actors and even among the authors who are dedicated to the study of this phenomenon has no consensus about its content. There are various proposals, different approaches and particular emphases.

To Jara Holiday (2006) systematize experiences only makes sense if what you want to systematize is a concrete practical experience. Actual experiences are dynamic (they are constantly changing), complex, with many interrelated elements and full of contradictions. The act of systematization to this author is understanding the various conditions, situations, actions, perceptions, interpretations, intentions, expected and unexpected results relationships and reactions of a given experience to extract lessons and communicate them.

Jara Holiday argues that systematize is not just reflection, orderly reconstruction of an experience, knowledge production, theorizing of practice or the participatory process leading protagonism of actors. The author affirms that all these elements occur or should occur in a process of systematization. However, he assigns a proper character of critical interpretation that there efforts to discover or explain the logic of a living process, the factors that interfere, making the relationship between them and try to explain why certain events occur.

To systematize an experience, there are several proposals. Jara Holiday (2006), presents a proposal in 5 steps: 1.The starting point that is necessary to had lived the experience and some register of it; 2.The initial questions that defines purpose, object and systematization axis; 3.Recovery the lived process in which reconstructs the story, orders and information classifies 4.Background reflection in which analyzes, synthesizes and critically interpret what happened 5.The points of arrival in that formulate conclusions and communicate learning experience. Elza Falkembach presents another proposal in three steps: 1.Preparation: approaching agents, experience characterization and focus setting of systematization; 2.Realization: develop basic concepts, information organization, retrieval process, evaluation of practice, synthesis of ideas and presentation of findings; 3.Socialization and feedback practice: dissemination of systematizing. (CFES, 2012)

The Solidarity Economy Movement synthesized, in documents already cited (see setion 1.2), principles and objectives of systematization. Principles are: 1.It is a reflection from practice that expresses the uniqueness of the experience, 2.It is an educational process that part of collective participatory building and providing knowledge organized, analytical and critical about the experiences of the subject 3. The systematization should be part of the training process (be organic) and feedback action 4. It is a reference for the research and analytical depth, aiming to increase knowledge and advance to the social process. 5. It is essential for the construction of technical tools and symbolic in order to incorporate quantitative and qualitative, objective and subjective, and micro and macro social dimensions 6. Preserve the historical memory of the workers experiences, respecting cultural diversity.

The objectives of systematization are: 1.Promote critical reflection on practice in order to improve it; 2.Disseminating the experiences and knowledge gained in order to inspire other experiences; 3.To help identify and reference the fields of research; 4.Collectively validate the knowledge and training practices; 5.Build technical tools and symbolic, in order to incorporate qualitative and quantitative indicators (sustainability socioeconomic, political, cultural, environmental, etc.) pointing to an assessment of education in social economy; 6.Build collective processes of training, consolidating networks, chains and exchange of experiences.

1.3 Experiences Systematization Tools

There are various instruments and tools to support the experiences systematization. The Solidarity Economy National Formation Center (CFES - National, 2012) identified some as: timeline, mind map, field diary and interviews.

Timeline is a didactic tool where it is possible to reconstruct and present events succession

and processes that enable the collectively trajectory of experiences understanding over a period of time. The events and occurring processes reconstruction is fundamental to the experience systemization , especially if it has not been performed continuously and permanently. Without this restoration will be difficult to critical experience reappropriation. Timeline is a tool that enables this reconstitution. Originally history study, this tool has undergone methodological variety and visualization and has been used in the Solidarity Economy experiences systematization process.

This tool needs to follow some principles and methodological guidelines as: 1. timeline establishment to identify periods in the experience history; 2.Differentiate experience "text" and "context", where "text" is the actual experience content and "context" the broader universe in which the "text" is inserted; 3.Collective timeline construction, which will facilitate the critical reappropriation by the group in order to strengthen their identity, enhance their practice, generate new knowledge. (CFES - National, 2012)

The mind map as shown by the CFES-National, is the appropriate tool to systematize the contents of point events in time, such as debates and discussions. This is a presentation tool of knowledge accumulation or organization of a debate. It is useful for faster systematization, to be made during or after discussion. Central ideas are focused at the same time as it enables comprehension and location of secondary features.

Field diary, since a register guaranteed accurate, contributes to memory retrieval, in a process of a documentary survey experience. This can be done through a closed questionnaire or semi-structured questions that are made early and as the respondent has responded, the interviewer asks new questions.

What is the way to go for those who want to start a systematization process? The presented literature are sufficient to conduct an efficient process of systematization?

The aim of this study is to increase understanding of collective systematization processes, especially when timeline is used. The specific objective is to identify variables that interfere in a collective systematization process, carried out at NuMI-EcoSol.

2. Overall strategies for researching, collection and data analysis planning, and empirical object characterization

The Multidisciplinar and Integrated Core of Studies , Formation and Intervention in Solidarity Economy (NuMI-EcoSol) is the object of study of this paper. NuMI-EcoSol is the sucessor by the Regional Incubator of Popular Cooperatives (INCOOP) at a public university, the Federal University of São Carlos (UFSCar). This is a Technology Incubator of Popular Cooperative (TIPC) similar to several other existing TIPCs in several Brazilian universities.

Incubators have emerged in Brazilian universities to support the initial activities of popular cooperatives of associated workers. Currently Brasil has more than 100 universities and about 80 incubators of popular cooperatives working in networks. Incubators are contributing through different experiences for the economic viability of solidarity economy initiatives, the initiatives sustainability and local social development and empowerment of people.

For over 10 years, TIPCs perfected the incubation method contributing to knowledge and education and SEVs consolidation. Incubators have expanded its scope, leaving the field of cooperatives and starting to discuss the Solidarity Economy more widely. Since then, the TIPCs spent incubating networks, informal groups and associations, working with multidimensional perspective, incorporating the perspective of local development.

INCOOP was born in 1999, devoting himself to teaching, research and extension activities in Solidarity Economy and incubation processes of solidary economic ventures in various economic activities and in different localities. It works in partnership with University Lecturer and students from different fields of knowledge to develop incubation projects of solidary economic ventures. In the year 2012, has been institutionalized as an academic unit, Numi-EcoSol. Will henceforth be used to refer to this academic unit as Numi-ECOSOL.

On a timeline development, it was possible to identify variables that affect this process. To construct this timeline was had consulted personal registers, Numi-EcoSol documents, executed projects reports and meeting reports.

The NuMI-EcoSol opted for developing a timeline to systematize their operations. However, this choice was not made collective analysis of the types of tools that exist for a possible comparison to each other, which would be desirable.

The strategy of the research is a post-fact, exploratory, descriptive and documentary characterization with an case study: the systematization of experience of the performance of NuMI-EcoSol.

3. Timeline Construction Process as tool for collective experiences systematization: general steps, variables that interfere and prospects for continued collective systematization process at NuMI-EcoSol

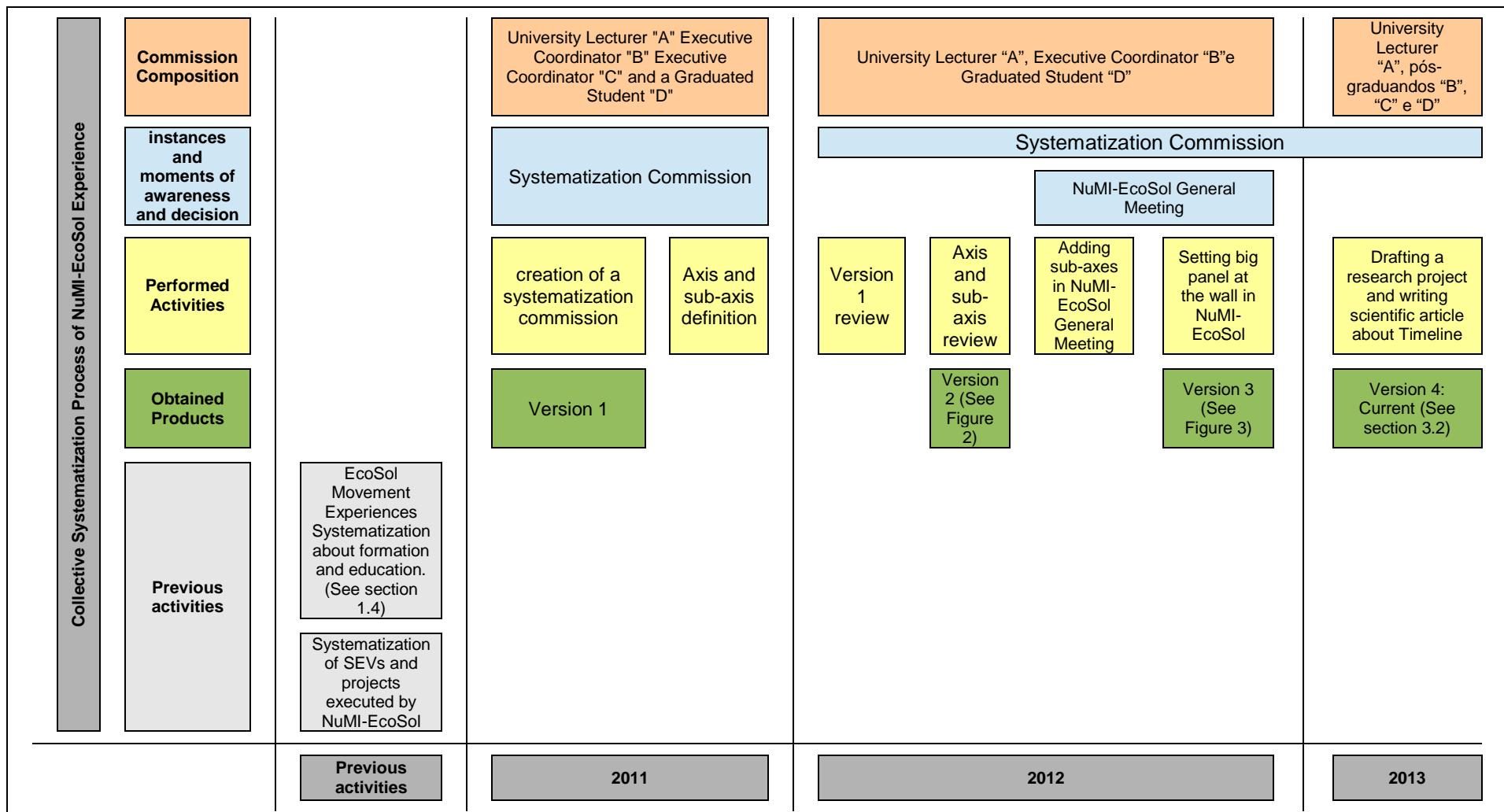
The NuMI-EcoSol performance systematization has been occurred collectively, permanently by using systematization tools. The systematization product is a timeline of the NuMI-EcoSol activities from its origin until April 2013.

The systematization process is also being systematized, but by systematization commission. The achieved products are: 1.Timeline of the process; 2.Favorable and unfavor variables oh the systematization process; 4.Continuity perspectives.

Below, will be presented, systematization process timeline, followed by the NuMI-EcoSol timeline to increase understanding of the process and the collective product obtained by performed systematization. Then we present the favorable and unfavorable variables and prospects for systematization continued process.

3.1 Collective Systematization Process Timeline of Numi-ECOSOL operation experience

To increase understanding of the systematization process of the NuMI-EcoSol performance were prepared a timeline of this process, metalinguistically. You can see in Figure 1, this timeline indicating backgrounds and organization process events, occurred from 2011. To the axis of systematization "Collective Processes Systematization of the experience of Numi-EcoSol" were defined the sub-axes "Commission Composition", "instances and moments of awareness and decision", "performed activities ", "obtained products " and " Previous activities".



Source: Authors

Figure 1 - Timeline of the systematization process of Numi - ECOSOL

Before 2011, there were systematization of some incubated ventures and some projects executed by NuMI-EcoSol. Were report two experiments of NuMI-EcoSol which used timeline tool to systematize them.

Timeline which systematize the SEV *MADEIRARTE* presents "episodes". There is no division year to year or month to month. This systematization was made from 2002 until 2011. Were explained the general strategies of advisory group research: HABIS (from University of São Paulo - USP) and NuMI-EcoSol. Systematization axis were not presented or explicited. Advice relations were presented: performed by HABIS, by NUMI-EcoSol and then by LIGNO (from São Paulo State University - UNESP); characterization, incubation, according to the NuMI-EcoSol incubating method; commercialization and exchanges by consumers. What intended to be observe in timeline is development and essential conditions, obstacles and limits of self-management and socio-technical adequacy of the group.

Timeline designed to systematize SEVs in the city of *Rio Claro* experience presents time division every month between 2003 and 2006. Timelines were elaborated for each of the 3 SEVs (laundry, dressmaking and bakery). Timelines have systematization axis presented between different SEVs and a general one. Each SEV has axis of classification: number of participants, new members, profile, income of the SEV, reserve fund, trades, business opportunities, difficulties, perspectives and strategies, needs, activities forming/assistance and general context. On project timeline systematization axis are: number of active participants, profile, income of the SEV, cooperative turnover, partnership, incubation team, the cooperative name, interventions and highlight of the general context. This timeline was developed with the objective of providing subsidies to continue the work the Numi-ECOSOL and the partner Women's Consulate along to the ventures. Another objective was to check the stage of consolidation achieved by venture with the possible prospect processes of desincubation.

Prior to Figure 1, it was happening an accumulation of studies and experiences on systematization of Solidarity Economy Movement (see section 1.2).

Since 2011, as can be seen in Figure 1, a commission was created to systematize experiences. It was composed by a university lecturer "A", two executive coordinators (degreeed professionals) "B" and "C", and a graduate student "D". Among the members of the commission, one of them, the university lecturer had been participating in instances of Solidarity Economy movement and accompanying systematization discussion and research. This commission met to define systematization axis and sub-axis and first version timeline, developed for the period between 2008 and 2011.

Axis and sub-axis definition is an important step on timeline construction. Most important aspects of the experience are systematized through them and not everything that happens. In the NuMI-EcoSol experience, axis were defined to acquire what we wanted to have as a result of the systematization process. The NuMI-EcoSol team have awareness that the Core has done since its origin knowledge production, education in Solidarity Economy and social reality action. From this collective conscious and based on the need of highlight this fact to several partners, were used this three activities types on the timeline axis. In any collective there is the organization management and the structure and functioning aspect of the group, that also became an axis. Finally, sources that fund NuMI-EcoSol activities became another axis. At this time, late 2001, first version was synthesized and scanned for its inclusion on a NuMI-EcoSol project.

In 2012, according to Figure 1, the executive coordinator "B" no longer participate in the systematization commission, which continued with other three members. From this moment the commission proposed the NuMI-EcoSol collective action for the systematization, using "timeline" as tool. The commission conducted a review of first timeline version that was being developed, redefined the systematization axis and sub-axis and developed the second version, which can be observed, despite that illegibly, but in order to get a sense of size of the tool, in Figure 2. This second version was presented at a meeting of the NuMI-EcoSol general team , at day August 31, 2012. For lack of a more systematic awareness, questioning were not presented as the timeline goal or purpose. Neither realizes that members understand the importance of this activity. At this meeting it was agreed, according to the report, that "in all general meetings this timeline will be assessed for suggestions or changes."

Source: Prepared by the systematization commission of NuMI-EcoSol
Figure 2 - Second version of the timeline of NuMI-EcoSol

Then, the commission established criteria for location, alternatives materials and layout for setting a timeline panel construction. The fourth version of timeline was fixed on the NuMI-EcoSol wall, (see Figure 3). This panel was developed intending to allow for collective timeline creation until March 2013.

Between strategies adopted to timeline fill are: invitations that were made to former members of NuMI-EcoSol with a commission member, in the supporting at the filling. From this strategie two former members and a participant of a SEV contributed to fill the timeline.



Figure 3 – Large timeline panel at NuMI-EcoSol

In April 2013, after successive panel falls, it was collected by the systematization commission, who took photos and digitalized it to the current timeline version.

3.2 Indissociability between knowledge production, education and social reality action explained by a timeline of action of NuMI-EcoSol

The timeline current version is the fourth version. This is still incomplete. The main sources consulted were reports of executed projects. The product that has been reached it is still a first exercise of a process involving the systematization collective team to their own performance.

Since its early versions, timeline is too large, making difficult its exposure. The reduction to fit into an article, makes it unreadable. Anyway, the focus of this work is not to present timeline contents but the construction process of it. In this sense, an explanation will be presented synthesizing systematization axis of the timeline. To do this, the latest version of the timeline, was scanned and highlighted axis to axis as shown in Figure 4.

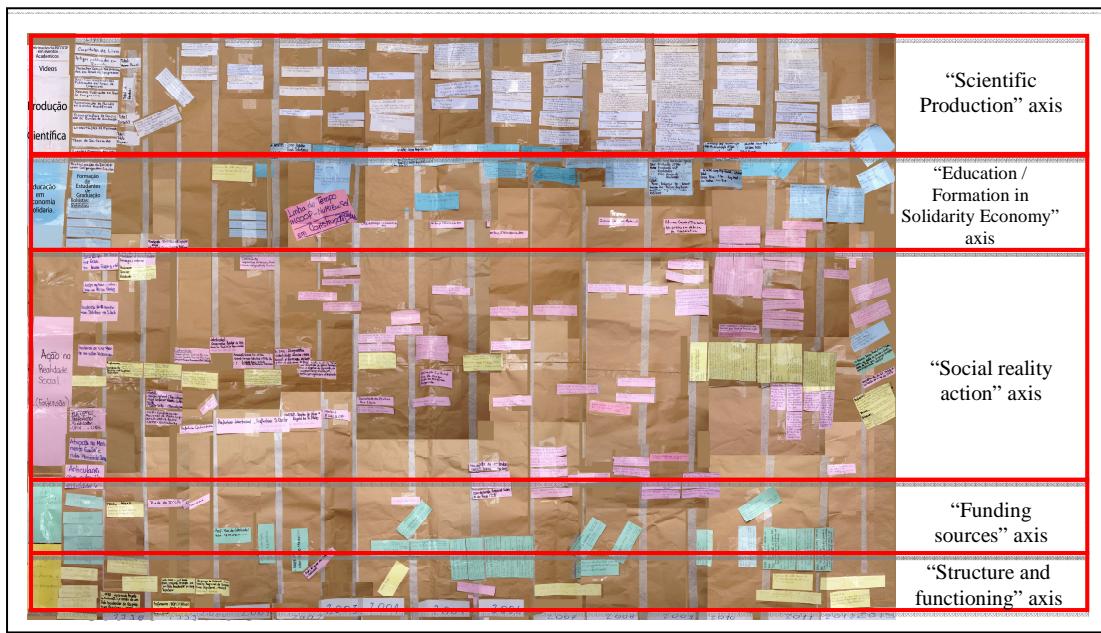


Figure 4 – Timeline division axis

First Timeline axis refers to the scientific production of NuMi-EcoSol, presented in Box 1.

Axis	Sub-axis	Accumulations synthesis in the period (1999 - 2013)
Scientific production	Types of scientific production performed and means of dissemination	Accumulation of scientific production of Numi-ECOSOL characterized by being diversified and several productions collectively elaborated

Source: Authors

Box 1 - Synthesis of the Scientific Production in Timeline

Since the beginning NuMI-EcoSol has been producing articles, monographs and dissertations emphasizing Solidarity Economy different aspects, with the involvement of undergraduate students of different courses for holding monograph, students from various masters courses. To increase the chances of dissemination the experiences developed and the results for different types of public and possibility of replication of its in other territories, the NuMI-EcoSol performs: 1. Continuous experiences systematization; 2. Production of means for disseminating results of its operations; 3. Events organizing and dissemination and evaluation conditions that favor and obstacles, to increase the chances of transfer to other groups and territories.

The Numi- ECOSOL prepared and make a effort to keep updated a scientific productions list since the beginning of its operations. A summary, grouped productions types, is the content of this axis in the timeline. For example, in 2001 were published one book chapter, seven full papers in the proceedings of Congress, a summary expanded, six abstracts. In addition the amount were inserted names of events.

Box 2 presents a synthesis of the second axis, referring Education/Formacion in Solidarity Economy made by NuMI-EcoSol between 1999 and 2013.

Axis	Sub-axis	Accumulations synthesis in the period (1999 - 2013)
Education/ Formation in Solidarity Economy	Students in graduate degree formation	Participation of students from various undergraduate courses in the discipline ACIEPE; Participation of these students in projects of social reality action
	Associated workers formation	Workers formation for associated work, self-management, products and services qualification; Educational spaces for workers such as meetings, workshops and especially in living situations in practice
	Graduated professionals formation	Educational spaces for formation of various graduated professionals: action in the incubation processes, actors articulation simultaneously scientific formation and experiences systematization
	Public managers formation	Educational spaces for public managers formation: meetings and seminars for joint action in the Solidarity Economy

Source: Authors

Box 2 - Synthesis of Education / Formating in Solidarity Economy in the timeline

Due to the Numi-EcoSol insertion in the university context, their actions have the undergraduate and postgraduate courses in various areas participation, serving as a relevant condition for the Solidarity Economy diffusion and the formation of professionals with greater potential to act to contribute to initiatives under the Solidarity Economy. These students fall in projects as trainees, fellows of various forms and students of discipline "Curricular Activity Integration of Instruction, Research and Outreach (ACIEPE) – popular Cooperatives and Solidarity Economy." The inclusion of the Solidarity Economy theme in undergraduate and graduate is still limited, through internships, undergraduate research, completion of course work and master's and doctoral degrees. There is, so far, in the universities of São Carlos a program of postgraduate specifically related to the Solidarity Economy. In addition to these forming activities, the team of Numi-ECOSOL offers lectures, short courses and workshops.

In this axis, the only sub-axis that was filled more fully was the sub-axis "Students in graduate degree formation" in which were inserted each offer ACIEPE discipline with number of students and their courses.

A summary of the changes in the social reality actions can be seen in Box 3.

Axis	Sub-axis	Changes synthesis in the period (1999 - 2013)		
Social reality actions	Incubation of solidarity economic initiatives	Incubation of Solidarity Economy cooperatives in various territories	Incubation of Solidarity Economy initiatives preferably in two territories (urban and rural)	Incubation of Solidarity Economy initiatives preferably in an urban territory (a neighborhood of São Carlos)
	Educational actions		Actions to increase access to citizenship rights: Leisure, health, education, culture.	
	Partners articulation	Local government and other actors articulation in São Carlos and region		Articulação with municipalities, municipal departments, actors operations in the target territory of NuMI-EcoSol
	Solidarity Economy movement performance		Performance in several instances of the Solidarity Economy movement at municipal, state and federal spheres	
		1999	2007	2011
				2013

Source: Authors

Box 3 - Synthesis of changes in the social reality actions in the timeline

This axis, "Social reality actions" has centrality in advising ventures and groups for the creation of Solidarity Economy initiative in the form of incubation. Until 2007 only incubating cooperatives located in the region of São Carlos. From 2007, to NuMI-EcoSol passes to operates in two territories (urban and rural) with a perspective to promoting territorial development. Then passes to advisory groups to form beyond economic ventures, other Solidarity Economy initiatives as exchange fairs, production chains and networks, focusing on only two territories, one rural and one urban. From 2011, the preferred action focused only on an urban territory, a suburb of the city of São Carlos. This sub-axis was being filled with information from the various groups that have already been advised, or are in the process of incubation. Included number of members, dates of foundation and other important facts in the history of the group. The sub-axis "educational actions", refers to educational activities to promote access to citizenship rights such as health, culture, recreation, mathematics education, among others. Were being inserted in the timeline the names of the activities. The sub-axis "Partners articulation" were being shown the various partners NuMI-EcoSol, which up until 2007 were predominantly governments of cities where the NuMI-EcoSol acted. From 2007 the partners were predominantly those operating in the target territories of NuMI-EcoSol, including NGOs, religious groups, city departments, research groups, among others. Finally, the sub-axis "Solidarity Economy movement performance" represents the participation of NuMI-EcoSol in several instances of the movement of Solidarity Economy. Were given the name of events.

As the synthesis of organization, management, structure and functioning of NuMI-EcoSol, see Box 4.

Axis		Sub-axis		Changes synthesis in the period (1999 - 2013)		
Organization, management, structure and functioning		Formalization processes		INCOOP as outreach program		NuMI-EcoSol as academic unit
		Decisions Instances		Weekly general meetings	Fortnightly general meeting alternating with meetings with staff solely on Territorial Development	Three monthly general meetings and one with staff solely on actions lines
					2007	2011
						2013

Source: Elaborated by the authors

Box 4 - Synthesis of organization, management, structure and functioning of NuMI-EcoSol Timeline

On this axis, were filled two sub-axes, "Formalization Processes" and "Decision Instances". As were had previously presented, INCOOP became institutionalized as NuMI-EcoSol. In the sub-axis "Decision instances" were being inserted the different ways in which the NuMI-EcoSol was organized about the process of decision making. Initially, until 2007, with weekly general meetings, from 2007 with specific meetings about territorial development every 15 days, interspersed with general meetings and from 2011 with three monthly general meetings and one to treat on the progress of structuring lines of action, constitute the entire academic unit of UFSCar.

Finally, in Box 5 we can observe the synthesis of funding sources of NuMI-EcoSol.

Axis		Sub-axis		Contents (1999 - 2013)	
Funding sources		Funding sources types		Funding sources of NuMI-EcoSol characterized by being diversified (UFSCar's budget, edicts, awards and collective fund)	

Source: Authors

Box 5 - Synthesis of funding sources in the timeline

The axis "Funding Sources" tried to rescue the different sources that fund the activities of NuMI-EcoSol. The first source was coming budget of UFSCar. Afterwards, the team began to capture resource through participation in edicts and also received awards. Another source of funding for the Core's activities was the establishment of a collective fund composed primarily of donation management fees of teachers.

It is noticed that the NuMI-EcoSol are just starting their collective process of systematization, and the effort to construct a timeline can still advance considerably. Critical reflection about their practice, through the timeline, is being held, but not collectively, only by members of the systematization commission. With the accumulation so far obtained is already possible to disseminate this experience, but as mentioned, even in a preliminary way. As the systematization process progresses, will be identifying which types of knowledge are needed to accumulate or produce to overcome the difficulties. This process carried out collectively contributes to the knowledge produced with the action group go being validated and appropriate for all.

3.3 Identification of variables that favor the process of collective systematization of performance of NuMI-EcoSol

Were identified as variables that favor the collective experience systematization of NuMI EcoSol, in particular the construction of a timeline: 1. Team member to participate in the instances of Solidarity Economy movement that has been conducting discussion about systematization; 2. Existence of a person or group of people with knowledge and skill in systematizing; 3. Demands for systematization; 4. Creation of a commission of systematization with a continued and permanent acting; 5. Existence of an awareness strategy, since the beginning of the process of systematization; 6. Motivated people; 7. Ownership of the people at the purpose of the timeline; 8. Participation of people who lived the experience; 9. Definition of axis and sub-axis made collectively from the beginning; 10. Access to sources of information on the experience systematized; 11. Presence and support of someone of the systematization commission at the time of filling the timeline by anyone.

The involvement of a university lecturer in the instances of Solidarity Economy movement contributes to this theme began to be discussed in NuMI-EcoSol. It is considered as favoring the participation of at least one person in Solidarity Economy movement that has been conducting discussion about systematization. In the experience of NuMI-EcoSol, a person with knowledge and skill in systematization was favorable to the realization of the process. Without this person this process would be less likely to be initiated and carried forward. Another factor that contributes to the continuation in the agenda of the people in building the timeline were demands for systematization in this collective. The writing of a book about 10 years of operation of NuMI-EcoSol, the inauguration of its headquarters, a visit of Paul Singer (the most famous author of Solidarity Economy in Brazil) and writing research reports are examples of these demands.

In this case, even with the existence of systematization commission was low participation of the collective. If the work of this commission were more continuous and permanent would increase the possibility of greater participation. In this experience, there was no systematic strategy and permanent awareness of people to fill the timeline. Only there was a presentation of the timeline in the general meeting and it was agreed that this would be filled continuously, reserving it for a while in meetings. However, this was not enough for a desirable filling. The participation of motivated people is considered to favour variable to perform any activity. It is further in a process of systematization of experience that is required persistence, as signaled in the 1st Education/Formation National Workshop of Solidarity Economy. A variable that favors people's motivation is the appropriation of them about the purpose of the organization process. Another favorable variable identified is the participation of people who have lived the experienced, in their process of systematization. The high turnover of people in NuMI-EcoSol makes the most of the current team be less than two years in it.

The definition of axis and sub-axis, if done collectively, since the beginning of the process contributes to the systematic appropriation of people and their motivation. For what is seen in literature, about timeline tool, authors not use axis and sub-axis or something similar to the process of systematization. How these experiences comprise this need? What they use, if they do, instead of axis and sub-axis?

Systematize aspects that have been set by someone else, even if someone in your team increases the degree of aversion to activity. Access sources of information about the experience systematized, like testimony of people who have experienced it (as former members or a participant in a SEV) and like quality register of the experience is favoring for the systematization of experiences. Much of the information has been obtained by commission members found in project reports performed by NuMI-EcoSol. In the time of filling the timeline by any person, the presence and support of commission member contributes positively to the systematization. Any contribution was made without the presence of this support. This also indicates that people are not appropriated of the systematization process, understanding activity as belonging to others and not her own. Another possibility is perhaps identified the little time dedicated or difficult to perform the fill.

3.4 Identification of unfavorable variables for the systematization process of collective action of NuMI-EcoSol

This Unfavorable variables were identified: 1.Lack of study on alternatives of visualization of systematization tool used; 2.Poor sources of information; 3.Only a person with greater knowledge and skill in systematizing; 4.High turnover of team members; 5.Low motivation, time and a repertoire of people.

The size of the panel elaborated by the systematization commission (see Figure 3), as both the size of the cartouches and the size of the font used for the fill was not properly analyzed. The panel fell several times due to their weight. There was wasting of space between the cartouches due lack of analysis regarding the size of these and the font size precluded visualization in smaller scale reproductions. The main source used of information to fill timeline, the research reports, was not standardized, with different degrees of detailing, incomplete and insufficient information regarding the activities performed. Another negative point was that only one person holds this knowledge and because the proposed construction of the systematization is collective, this was impaired. It is desirable to appropriate conceptual, theoretical and methodological foundations about systematization. As previously mentioned the high turnover of staff people disfavors the process of systematization because newly people have more difficult to contribute in the reconstruction of an activity that they did not participate.

As a continuing process of systematization, is intended conducts awareness of people with desirable profile, taking into account the variables indicated, for example, someone who has participated in the experiment for a long time and be aware of the importance of this action. Another proposal is to make a fill exercice witj a small group who had participated in a common experience, for example, members of the same SEV. This process favors the exchange of perceptions between participants and contributes to providing more information, because the information of someone contributes to the memory of another. Also contributing to the validation of information, which can complement or even contradict. Through dialogue among the people present, the contradictions can be overcome.

About to all of the axisss and sub-axis, intend to perform constant revisions. Until now there has been the possibility of inserting some sub-axis. In axis "Education/Formation in Solidarity Economy": Number of people formed (undergraduate, graduate, professional, associated workers); Current situation of formed members of NuMI-EcoSol. In axis "Funding Sources": Funded resources. In axis "Organization, management, structure and functioning": administrative management, structure and function.

Another objective is to improve the tools used, prepare a panel for more definitive, for example, prevent falls, and beyond perform forming activities to deepen the concepts. A doctoral research project is being prepared that will start running later this year.

It is possible to see that from the elaboration of a timeline is possible to identify variables that affect, perceived changes in the systematized experience, lacks, new issues and proposals for continuity. It is also noted that the process of systematization of experiences is important for improving the practice of groups that not need be of Solidarity Economy.

References

AMORIM, A. N. **Economia Solidária – princípios e contradições.** Dissertação (Mestrado) em Política Social pelo Programa de Pós-graduação em Política Social da Universidade Federal do Espírito Santo, Vitória, 2010.

CENTRO NACIONAL DE FORMAÇÃO EM ECONOMIA SOLIDÁRIA. **Sistematização de experiências da Economia Solidária: referenciais, etapas e ferramentas para o processo de sistematização.** Brasília, DF, 2012

CONSELHO NACIONAL DE ECONOMIA SOLIDÁRIA. I Conferência Nacional de Economia Solidária. Brasília, DF, 2006.

CONSELHO NACIONAL DE ECONOMIA SOLIDÁRIA. Conferência Temática de Formação e Assessoria Técnica. Caderno Temático da II CONFERÊNCIA NACIONAL DE ECONOMIA SOLIDÁRIA. Brasília, DF, 2010.

CONSELHO NACIONAL DE ECONOMIA SOLIDÁRIA. II Conferência Nacional de Economia Solidária. Brasília, DF, 2010.

CORTEGOSO, A. L. e SHIMBO, I. Empreendimentos solidários, universidades, movimentos sociais e gestores públicos: articulação de esforços na promoção da Economia Solidária no Brasil de hoje. In: **2ª Jornada Universitária sobre Cooperativismo, Economia Solidaria y Processos Associativos.** Montevidéu, 2005.

FÓRUM BRASILEIRA DE ECONOMIA SOLIDÁRIA. IV Plenária Nacional de Economia Solidária: Relatório final – Luziânia, GO, 2008.

FÓRUM BRASILEIRA DE ECONOMIA SOLIDÁRIA.. V Plenária Nacional de Economia Solidária: Relatório final – Luziânia, GO, 2013.

FERREIRA D. M. **Economia solidária como estratégia para o Desenvolvimento Territorial. A atuação da INCOOP no Jardim Gongaza e entorno, São Carlos, SP.** Dissertação de Mestrado. Programa de Pós-Graduação em Engenharia Urbana, Universidade Federal de São Carlos, São Carlos, 2010.

GAIGER, L. I. G.. **Sentidos e Experiências da Economia Solidária no Brasil.** Porto Alegre: Editora da UFRGS. 2004A

GOMES, F. P., KLEIN, M. J., et al. **Introdução a Economia Solidária.** Secretaria Nacional de Economia Solidária (Senaes): Ministério do Trabalho e Emprego - M.T.E. 2002.

_____. A Racionalidade dos Formatos Produtivos Autogestionários. **Revista Sociedade e Estado,** v.21, n.2, p.513-545. 2006.

JARA HOLIDAY O. **Para sistematizar experiências.** tradução de: Maria Viviana V. Resende. 2. ed., revista. – Brasília: MMA, 2006. 128 p. ; (Série Monitoramento e Avaliação, 2)

OLIVEIRA M. C. S. B. **Conversão do conhecimento: estudo de caso em incubadora universitária de empreendimentos de economia solidária.** Dissertação de Mestrado pelo Programa de Pós-Graduação em Ciência, Tecnologia e Sociedade (PPGCTS) da Universidade Federal de São Carlos. São Carlos, SP, 2012.

SECRETARIA NACIONAL DE APOIO A ECONOMIA SOLIDÁRIA e FÓRUM BRASILEIRA DE ECONOMIA SOLIDÁRIA.. **I Oficina Nacional de Formação/Educação em Economia Solidária:** documento final. – Brasília: MTE, Senaes, SPPE, DEQ, 2006.

SECRETARIA NACIONAL DE APOIO A ECONOMIA SOLIDÁRIA e FÓRUM BRASILEIRA DE ECONOMIA SOLIDÁRIA.. **II Oficina Nacional de Formação/Educação em Economia Solidária:** documento final. – Brasília: MTE, Senaes, SPPE, DEQ, 2007.