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Peer Reviewed Journal via three different mandatory reviewing processes, since 2006, and, from September 2020, a fourth mandatory peer-editing has been added.

The Journal on Systemics, Cybernetics and Informatics: JSCI (ISSN: 1690-4524), is a peer-reviewed open-access international publication in the areas of Systems Philosophy, System Sciences and Engineering (Systemics), Communication and Control concepts, systems and technologies (Cybernetics,) and Information Systems and Technologies (Informatics), as well as on, and especially on, the relationships among these areas and their applications.

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GENERAL INFORMATION

Editorial Purpose, Strategy and Methodology

As it was emphasized in the editorial of the first issue, the main purpose of the Journal is to collaborate in the **systemization** of knowledge and experience generated in the areas of Systemics, Cybernetics (communication and control) and Informatics. This systemization process necessarily implies a progressive development and expansion of the **relatedness** among the associated areas, as well as among their respective disciplines. Since improvement in **interdisciplinary communication** would provide a very good support for the sought systemization process, the journal is a multi-disciplinary one oriented 1) to support inter-disciplinary communication, and 2) to offer a venue for publishing inter-, trans-, and cross-disciplinary research, enquiry, case studies, and reflections.

We are trying to support the process of interdisciplinary communication among, and in, the areas included in Systemics, Cybernetics and Informatics, by means of:

1. providing a **multidisciplinary forum** in the related areas,

2. fostering **interdisciplinary research** in them,

3. publishing papers related to transdisciplinary concepts, allowing different disciplinary perspectives on the same concept, and

4. encouraging communication a) among disciplines by means of **interdisciplinary tutorials**, and b) among the academic, the public and the private sectors by means of publishing information related **multi- and inter-disciplinary** projects which involve at least two of these sectors.

In the context of this main purpose, a basic immediate objective of the Journal is to provide a multidisciplinary vehicle for disseminating information about diverse but highly interrelated areas through a single medium. It covers a wide range of areas, sub-areas and topics related to Systems Science, Engineering and Philosophy (Systemics), Communications and Control of Mechanisms and Organisms (Cybernetics) and Computer Science and Engineering, along with Information Technologies (Informatics).

These three major areas are continuously evolving into integrative means of diverse disciplines.

• Informatics provides **instrumental** means for many disciplines and support processes of inter-disciplinary collaborative research.

• Cybernetics showed to be fruitful in providing **conceptual** means for inter-disciplinarity as well as for analogy generation and cross-fertilization between mechanisms and organisms, in order

o to improve our understanding of organic systems,
o to enhance our designs of mechanical systems, and
o to inspire the conceptualizations and the production of hybrid systems, as it is the case of cyborgs.

• Systemics has been viewed by an increasing number of authors as one of the most fundamental **trans-disciplines**.

Consequently, each one of these three major areas has been providing an increasing support for multidisciplinary problem solving research as well as for interdisciplinary communications and integrations among different academic disciplines and among academic, industrial and governmental organizations.

Therefore, the basic aims of this Journal are

1. To support **multidisciplinary** information dissemination related to different disciplines in the major areas of Systemics, Cybernetics and Informatics (SC&I).

2. To foster **interdisciplinary communication** based on the integrative potential of these three major areas. Accordingly, the journal will include not just areas from SC&I, but also from the relationships among them, among their areas and sub-areas and between them and disciplines from other areas, especially in the form of applications of SC&I disciplines in other disciplines, and vice versa. Consequently, a strong emphasis is made on relationship areas and on what has been named as hyphened sciences, engineering and technologies, in order to refer to the inter-disciplines that are emerging as a consequence of multi- and inter-disciplinary real-life-problem-centered research.

3. To foster and support inter-organizational R&D and enquiry among academy, industry and government; especially in the context of real life problems requiring multi- and/or interdisciplinary teams.

The Journal has been having a multidisciplinary orientation. Interdisciplinary and transdisciplinary sections will gradually grow. The multidisciplinary part of the Journal will be nourished, basically, from the best papers presented in conferences in the Journal's areas, basically from the conferences or workshops organized by The International Institute of Informatics and Systemics (IIIS, www.iiis.org) which is also the sponsor of the Journal. The best 25%-30% of the papers presented at IIIS's conferences (roughly equivalent to the 10%-15% of the articles submitted to the respective conference) will be published in the journal, after their respective authors had made the respective modifications and extensions pertinent to archiving and journals. The journal is also publishing invited papers and papers, mostly in *special issues* related to the plenary keynote addresses delivered at IIIS conferences. Regular papers in regular issues contain original research. Invited papers may also be oriented to 1) inter-disciplinary communication of original research, 2) experience or practice based-reflections, 3) literature review, and/or 4) ways of integrating research with practice, academy with industry, and different academic activities (research, educations, and real life problem solving or consulting). One of the functions of the Journal Editorial Board is to nominate potential authors of invited papers. Other possible authors for invited papers are selected from the top 5% of the best regular papers published in the regular issues of the journal which has been reviewed by the two-tier reviewing methodology of the journal (www.iiisci.org/journal/SCI/Methodology.pdf?var)

Most regular papers published in the regular bimonthly issues in the first 12 years of the journal papers (i.e. about the 95%) have been selected by the audience of IIIS' conference as the best of those presented in the respective sessions. Authors of all papers published in the first 12 years (about 1000 papers) had no Article Processing Charge because of the sponsorship of the IIIS. The plan for the next stage of the journal is to accept submissions which have not been selected among the best 25%-30% of those presented at conferences organized by the IIIS. Consequently, an Article Processing charge will be required for those papers that would be accepted via the two-tier reviewing methodology of the journal briefly described at www.iiisci.org/journal/SCI/Methodology.pdf?var.

Regular papers published since 2006 were accepted by means of the two-tier reviewing methodology, we just referred to, and the final selection was made by the respective conference audience regarding the best sessions' papers.

We think that with this approach we are publishing a very high quality journal, because its basic content will be related to the best 25%-30% of the papers presented in related conferences, which is the **equivalent**, though not exactly the same, at a rate of 75%-80% of refusal. This way of achieving a high quality Journal, will not be based on a high number of actual refusals. With this strategy we will be avoiding being the cause of the hidden psychological and economical costs caused to the authors of refused papers. The greater the refusal rate, the greater the hidden costs caused, by the editors, to potential authors of refused papers by the editors. We are hoping, with our **editorial strategy** to minimize the hidden costs we might be causing by means of our editorial decision, while not compromising the journal high quality. With the new stage of reviewing papers sent directly to the journal we will not be able to avoid these external hidden and implicit costs of a high percentage of refusals.

Our **methodological strategy** will be an evolutionary and a **systemic**, not a **systematic** one. To organize the editorial process and to manage the publishing operational activities will be done with an **open**, **elastic**, **adaptable** and **evolutionary** methodological system. It will have the **flexibility** required to adapt the Journal, its editorial policy, its organizational process and its management to the dynamics of its related areas and disciplines, to changes produced by the inherent learning process involved, and to the uncertainty of the environment. In the context of the methodological adaptability we are planning to initiate the second stage of the Journal.

A two-tier peer-reviewing methodology will also be used in the new second stage of the the Journal of Systemics, Cybernetics, and Informatics. This methodology is based on two-tier reviews: open (or non-blind, non-anonymous) and the traditional double-blind reviews. Final acceptance depends of the two kinds of reviews but a paper should be recommended by non-blind **AND** double-blind reviewing in order to be accepted for publication. A recommendation to accept made by reviewers in the non-blind method is a **necessary** condition, but it is not a **sufficient** one. A submission, to be accepted, should also have a majority of the reviewers in its double-blind method recommending its acceptance. This double necessary conditions generate a more reliable and a rigorous review than those reviewing processes based on just one of the indicated methods, or just on the traditional double-blind reviewing method.

The Journal on Systemics, Cybernetics and Informatics (JSCI) is a peer-reviewed open-access international publication in the areas of Systems Philosophy, System Sciences and Engineering (Systemics), Communication and Control concepts, systems and technologies (Cybernetics,) and Information Systems and Technologies (Informatics), as well as on, and especially on, the relationships among these areas and their applications.

SPECIAL ISSUE

Trans-Disciplinary Communication

Co-Editors:
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Borders and Bridges

Boundaries as an opportunity

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Abstract

The boundary is an ephemeral concept, an imaginary line that marks the terms of a territory.

The term boundary is related to the concept of limit that indicates both a sign not to be exceeded and, by extension, a value that conditions a behavior or a performance. The Italian word "confine" that means boundary comes from the Latin cum-finis; the etymology of the term indicates something that separates but, at the same time, that unites, something that has an end but that creates the presuppositions for something else.

The border, therefore, is not only a limit but an opportunity; crossing the border is a gesture that gives us the awareness that nothing is taken for granted, immutable and that everything can change in the relationship with otherness.

Cultural wealth is built first in a direct relationship with the material and immaterial resources of a place but also through "contaminations" that come from external knowledge and are acquired and made their own through a local reinterpretation. Globalization has cut the threads of such contaminations, drying the sources of diversity in the project and giving us back the shared universal languages that guide the aesthetics of objects. The recent pandemic has shown us how the creation of virtual connections has contributed to enrich the scenarios of research by giving it a multiplicity of views. The same mode can be used for applied research.

Borders and Bridges is a pilot project of exchange between international universities that is born with the aim of developing practices of transdisciplinary cultural contamination in the context of an exchange through the internet between international universities. The design discipline has in its D.N.A the ability to connect and develop proposals that create synthesis between the vision of project activities and that of social sciences. The idea of the project is to work on borders as lines of opportunity for the elaboration of elements of

innovation through the tools of the design discipline. The dual objective is, on the one hand, to promote new methods of exchange in the educational field, and on the other to promote the encounter between cultural systems.
The design, in fact, is free from borders, "has always had the ability to look at different fields and disciplines favoring cross-contamination" (Cappellieri A. Tenuta L. 2019).

Keywords: Borders, Connections, Cultural Diversity, Contaminations

1. Introduction

The twentieth century has been the progress of the rational logic of industry and the emergence of a new discipline, Design, which is entrusted with the project of the industrial product. It defines a new aesthetic, outlined by the school of the Bauhaus first and by the school of Ulm then, which decrees the detachment between what is produced industrially and what is manufactured manually, between the geometric purity of the industrial product and the decorative expressiveness of the handicraft product. The *Ornament is a crime* by Adolf Loos, that establishes the birth of a new aesthetic for the industrial product, starts a progressive disappearance of the decorative aspects in favor of a strengthening of the formal aspects resulting from the functions. A tendency to simplification that in the subsequent modification of the tools of investigation and representation of the project (the launch of digital graphics with the supremacy of the three-dimensional over the two-dimensional) moves even more attention towards the form (three-dimensional modeling causes an imbalance towards the design of shapes and makes the application of decorations on surfaces complex). The correspondence form-function is the guiding concept on which throughout the twentieth century was founded a differentiation between design and art and between industry and crafts. The design expresses aesthetic and formal languages of simplification, fundamental for the industrial product but not congenial to the handicraft product where the simplification excludes the craftsman's wisdom and the stratification of tacit knowledge. In a new dialogue of design with art and craftsmanship it is absolutely necessary to define new aesthetic languages, identify tools and methods for a return to diversity in order to encourage

and support a new area of research that can promote a meeting between design culture and local identity.

2. State of Art

The widening of the vision of the design towards the territories of the handicraft that in Europe takes off at the end of the sixties, brings to the evidence the problem of the project aesthetic languages. The languages with which design at first deals with the relationship with material cultures are languages of simplification that often interrupt the expressive continuity of tradition and cancel the value of the contribution of "know-how" to the project. The theme of languages is the main theme of the connections between craftsmanship and design. From the *Ornament and Crime* of Loos that establishes the birth of a new aesthetic for the industrial product design has pursued a progressive cancellation of the decorative aspects in favor of a strengthening of the formal aspects. A tendency to simplification that, in the reorganization of the investigation tools of the project and in the transition from the two-dimensional of the manual drawing to the three-dimensional of the virtual modeling, has shifted more attention towards the form (3D modeling causes an imbalance towards the generation of the casing discouraging complex processes such as the application of decorations to surfaces)

The renewal and adaptation of the decorative apparatus today represents a complex challenge for a new vision of design. The task is on the one hand to reread the forms, decorations and symbologies that come from the phase of acquisition of knowledge, on the other that of the elaboration of new signs, expression of a diversity, that can strengthen the relationship of objects with places. Every diversity is born and defined in the comparison with otherness. The identity that can feed a new season of the project is the identity of which Maurizio Bettini speaks, which does not correspond to the static image of the fixed roots in the land from which they receive nourishment, but to the dynamic image of the river whose flow is

continuously fed by the introduction of new tributaries. "*Ours is an expanding society, an increasingly horizontal society, in which the cultural models and products of other communities enter more and more frequently in parallel or in series with ours. We could therefore suggest looking for imaginary people capable of defining tradition no longer in vertical terms - from bottom to top or vice versa - but rather in horizontal terms. Tradition could very well be imagined as something that - horizontally - unites with other distinctive traits, and together with them helps to form the identity of people. If you really have to resort to images and metaphors, to talk about collective identity - and I fear that, handling such a vague and ambiguous concept, you cannot do without - in place of those of the tree/ roots or summit/ descent, so vertical, one could resort to the image, very horizontal, of river/tributaries*".

Starting from these premises has been developed research in two initiatives (Pending Cultures and Borders and Bridges) whose purpose was to experiment on a large scale the construction of new design languages starting from the possibilities offered by the technologies of internet to cross cultures to generate new languages. Both projects work on the idea of Boundary. It is an ephemeral concept, an imaginary line that marks the terms of a territory. In fact, there is no physical line in nature that clearly separates one space from the other, but it is the character of metamorphosis that predominates. It is man rather than having transformed this character of diversity into a condition of separation. A limit (a concept to which the Italian term border refers) that indicates a sign not to be exceeded, but by extension, a value that conditions a behavior or a performance. Globalization then emphasized this idea of opposition, isolating realities rather than really looking at the world as a system of connections. But if we look at the etymology of the term, from the Latin *cum-finis*, we realize that the border indicates something that separates but, at the same time, that unites; something that has an end but that creates the conditions for something else.

The boundary is an ephemeral concept, an imaginary line that marks the terms of a territory. The term boundary is related to the concept of limit that indicates both a sign not to be exceeded and, by extension, a value that conditions a behavior or a performance. The Italian word "confine" that means boundary comes from the Latin *cum-finis*; the etymology of the term indicates something that separates but, at the same time, that unites, something that has an end but that creates the presuppositions for something else. Boundaries can be limits or opportunities. In our view, the border represents an unlimited opportunity for possible connections between different identities. Hence the will to build bridges that can connect diversity. Among the many real Borders and Bridges works on imaginary borders (those that unite and do not divide) geographically distant realities but often close to ideals. It is a matter of approaching the concept of border to the idea of "contamination", as a process that takes a piece from one side and the other to sew them together. It's bringing the hallmarks of one language into another. Diversity is in fact a sign of personalization, a special character that enriches the common language, but at the same time makes recognizable products, their culture and their territoriality.

3. Project

The idea behind the project is to create connections between designers belonging to different cultural systems in order to develop new contamination languages. In this sense, the goal is twofold, on the one hand to promote new teaching methods, and on the other to experiment the encounter between different knowledge systems in order to develop new languages and apply them to certain specific types of objects.

The program, developed by a research group within the Design Campus of the University of Florence, has had a three-year development and has involved first a network of university professors and researchers belonging to 18 international university institutions and subsequently 650 students (in the three years) from the universities involved in the research.

Pairs of students of which one Italian and one foreigner developed four-hand projects working mainly on the elaboration of dialogue languages starting from iconographic elements belonging to their respective cultures. The quality of the work was made possible by a double system of control over the projects carried out by Italian teachers and teachers of the country of origin.

The aim of the project was mainly to verify the students' different predisposition to the reworking of signs and forms generated by specific cultural references and therefore a design system that did not start from the blank sheet but from a network of signs, colors, materials, types belonging to their culture. These references were then crossed to generate mixed objects, on the borders between craftsmanship and art but allowed by the generative design process to enter fully into the experimentation of design.

The work plan has been divided into phases.

In the first phase, the group of teachers, through meetings and contacts via email, elaborated the general theme and the procedure that each teacher later proceeded to illustrate to the students of his own university. In addition to the general theme of the initiative, a specific theme has been agreed for each year.

Each professor at foreign universities then selected a group of ten students (preferably bachelor students in the third year of the course) to participate in the project and sent the list of their emails to Italian teachers.

In the second phase, each Italian student was randomly paired with a foreign student. The Italian student has received exclusively the email of the foreign student without knowing sex, language, nationality. From there on, for each pair of students a dense intersection of connections began that led first to get to know each other and then to focus on the topics of research and project. For these contacts different media (email, whatsapp, wechat, skype) and different languages (mainly English,

Spanish and Italian) were used. During the elaboration of the projects the students were followed by the teachers at the respective universities. At the expiry date established each pair of students sent their project based on a template sent by the organizers of the program. A Facebook page was the virtual meeting space between all the participants in the project.

In the third and final phase, the projects received were placed in a Dropbox folder accessible to all teachers in the group who evaluated the projects. Thirty projects are selected from a cross-ranking. The couple of authors of each project are given 30 days for prototyping. The thirty projects received together with the prototypes are exhibited in an exhibition in Florence. Foreign students are also invited to the exhibition, hosted by their project partners. A selected commission of designers, university professors, representatives of the world of culture and production awards at the exhibition some prizes to the best projects. A certificate of participation has been sent to each author.

Borders and Bridge has been a project that in its founding ideals has clearly represented the changed historical scenario of recent years, and through digital tools and virtual space has exceeded those physical limits that have now become more evident. The pandemic has brought world citizenship into an almost alienating state, in which space has been confined to the confines of one's own home, sometimes one's own room. Those imaginary boundaries hypothesized between very distant geographical areas are the basis of a new everyday life, where diversity is equivalent to quality. This is the culture of creative contamination, a universal language that embraces multiple identities; tracing boundaries no longer as lines of separation, but bridges that unite.

4. Conclusions

The main objective of the program is to investigate the opportunities offered by new communication technologies creating processes applied in this case to work on new languages but replicable in others. The secondary objectives are:

- the definition of a specific design approach for the enhancement of cultural diversity and therefore a design system involving an individual research phase and following a cross between the results obtained for the development of the project.
- the creation of a network of connections that could exploit the opportunities offered by new communication technologies by creating processes that could then be replicated in other experiences
- the international scope of the initiative with a value attached to the exchange of experience and knowledge

Since the start of the project, different dissemination systems have been adopted. The project was mainly channeled through several web pages which represented both information and networking tools for research participants.

Secondly, the presentation of prototypes and papers at the end of each research year has been a tool for disseminating results and disseminating research ideas and objectives. On the occasion of the inauguration and the conclusion of the exhibitions, days of research have allowed to deepen the topics covered and we are working on a book that tells the experience and will represent a further stage of the dissemination process.

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