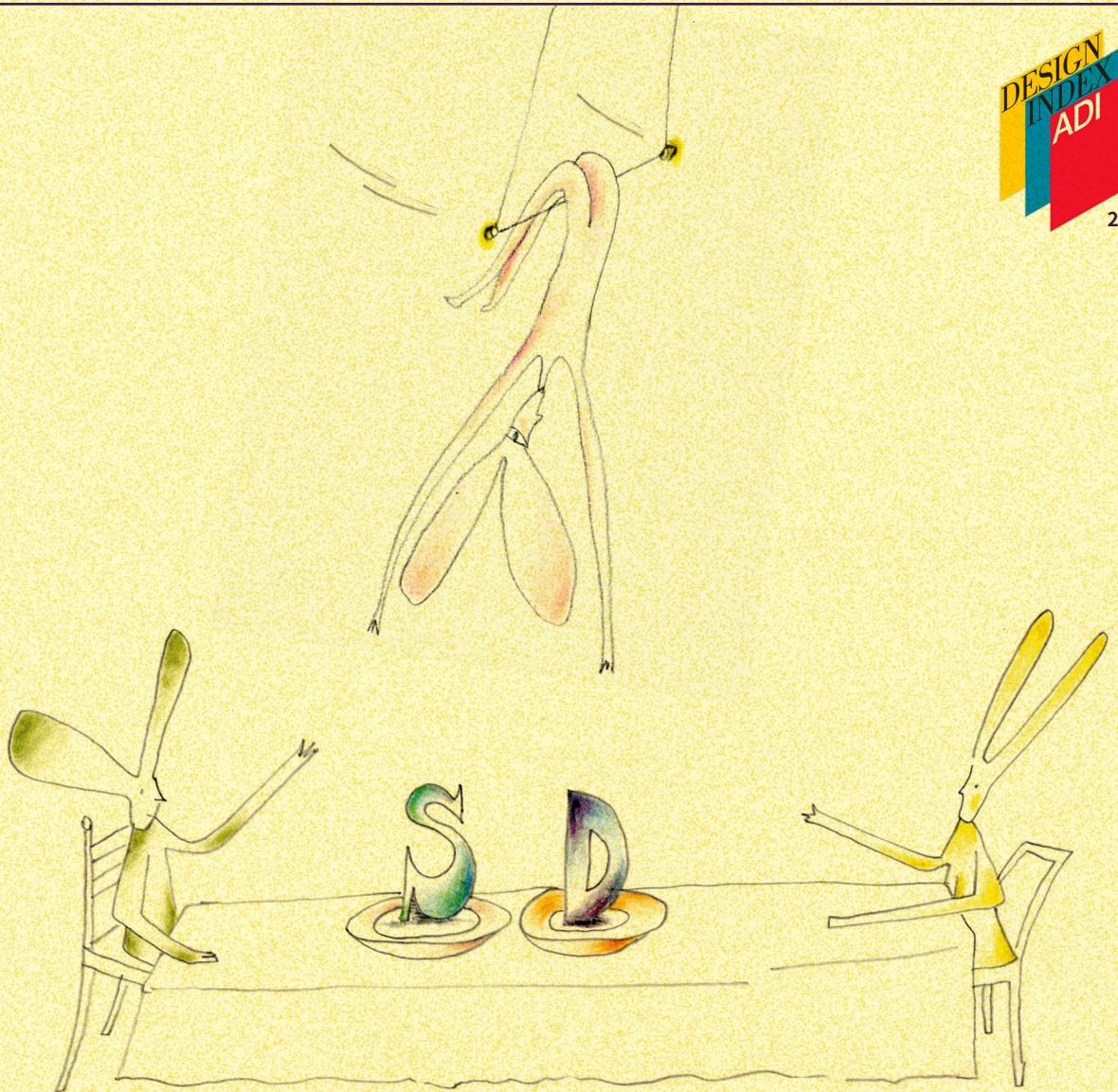


Ais/Design
Journal

Storia e Ricerche



AIS/DESIGN JOURNAL

STORIA E RICERCHE

VOL. 7 / N. 12-13

DICEMBRE 2019

GIUGNO 2020

SOCIAL DESIGN.

DESIGN E “BENE COMUNE”

ISSN

2281-7603

PERIODICITÀ

Semestrale

INDIRIZZO

AIS/Design

c/o Fondazione ISEC

Villa Mylius

Largo Lamarmora

20099 Sesto San Giovanni

(Milano)

SEDE LEGALE

AIS/Design

via Cola di Rienzo, 34

20144 Milano

CONTATTI

caporedattore@aisdesign.org

WEB

www.aisdesign.org/ser/

DISEGNO IN COPERTINA

Mario Piazza

Ais/Design

Journal

Storia e Ricerche

COLOPHON**DIRETTORE**

Raimonda Riccini, Università Iuav di Venezia
direttore@aisdesign.org

COMITATO DI DIREZIONE

Marinella Ferrara, Politecnico di Milano
Francesco E. Guida, Politecnico di Milano
Mario Piazza, Politecnico di Milano
Paola Proverbio, Università Cattolica del Sacro Cuore, Milano
editors@aisdesign.org

**COORDINAMENTO
REDAZIONALE**

Chiara Lecce, Politecnico di Milano
caporedattore@aisdesign.org

COMITATO SCIENTIFICO

Giovanni Anceschi
Alberto Bassi, Università Iuav di Venezia
Fiorella Bulegato, Università Iuav di Venezia
Giampiero Bosoni, Presidente AIS/design, Politecnico di Milano
Maddalena Dalla Mura, Università Iuav di Venezia
Elena Dellapiana, Politecnico di Torino
Grace Lees-Maffei, University of Hertfordshire
Kjetil Fallan, University of Oslo
Priscila Lena Farias, Universidade de São Paulo
Silvia Fernandez, Nodo Diseño América Latina
Jonathan Mekinda, University of Illinois at Chicago
Gabriele Monti, Università Iuav di Venezia
Vanni Pasca, past-president AIS/Design
Catharine Rossi, Kingston University
Susan Yelavich, Parsons The New School
Carlo Vinti, Università di Camerino

REDAZIONE

Letizia Bollini, Libera Università di Bolzano
Rossana Carullo, Politecnico di Bari
Rosa Chiesa, Università Iuav di Venezia
Paola Cordera, Politecnico di Milano
Luciana Gunetti, Politecnico di Milano
Alfonso Morone, Università degli Studi di Napoli Federico II
Susanna Parlato, Sapienza Università di Roma
Monica Pastore, Università Iuav di Venezia
Isabella Patti, Università degli studi di Firenze
Teresita Scalco, Archivio Progetti, Università Iuav di Venezia
Eleonora Trivellin, Università degli studi di Firenze
Benedetta Terenzi, Università degli Studi di Perugia

ART DIRECTOR

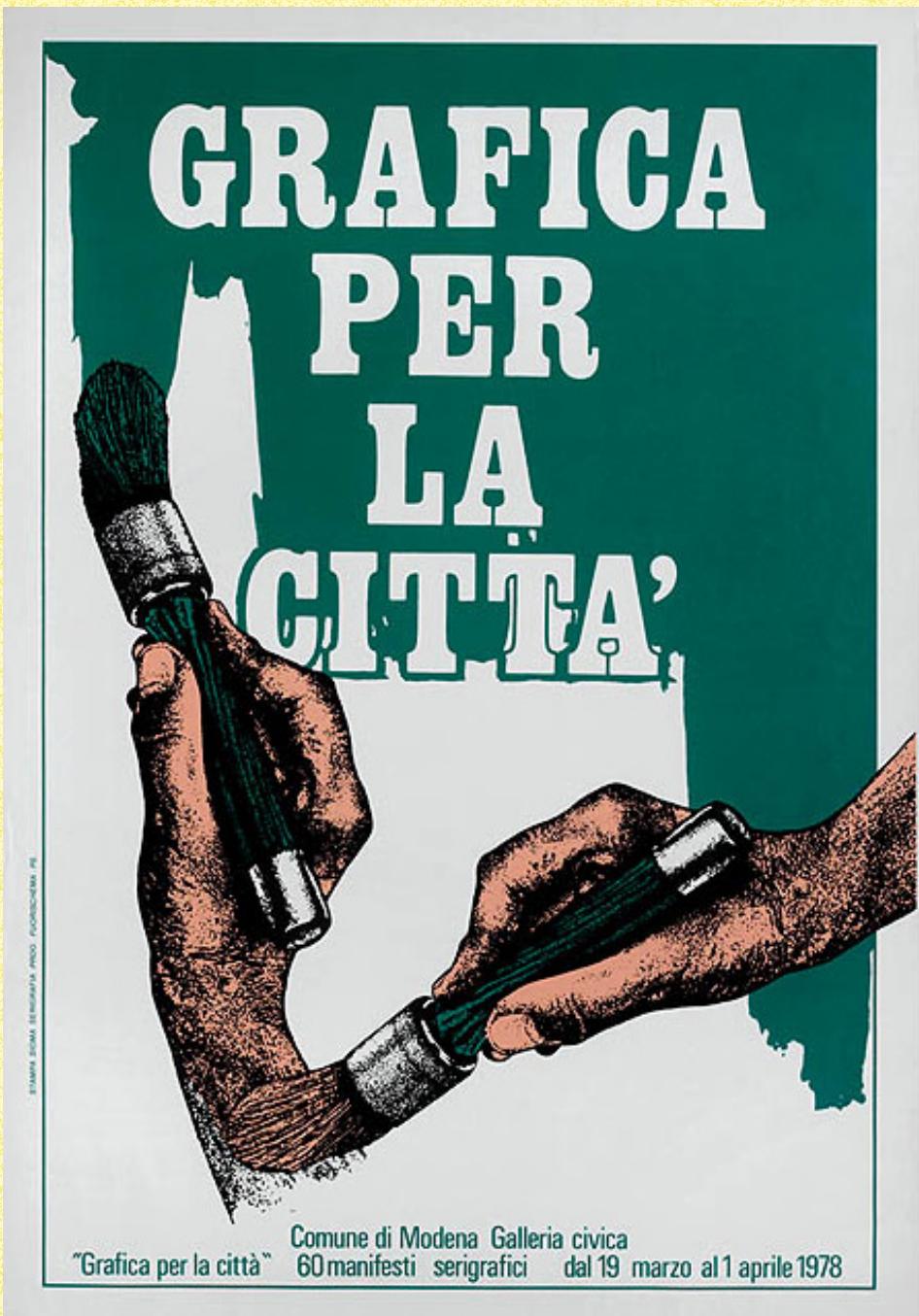
Francesco E. Guida, Politecnico di Milano
Daniele Savasta, Yasar Üniversitesi, Izmir

INDICE

EDITORIALE	SOCIAL DESIGN. DESIGN E “BENE COMUNE” Marinella Ferrara, Francesco E. Guida, Mario Piazza & Paola Proverbio	9
SAGGI	DESIGN PER LA COMUNITÀ: IL CONTRIBUTO DI GIOVANNI KLAUS KOENIG Isabella Patti	19
	PRINCIPLES OF GOOD DESIGN AND SOCIAL DESIGN Alfonso Ruiz Rallo & Noa Real García	31
	LA DIMENSIONE ETICA DEL DIGITAL DESIGN. ACCESSO E ACCESSIBILITÀ, TRA UTOPIA FONDATIVA E CONTEMPORANEITÀ Letizia Bollini	51
	SOCIAL DESIGN ON A SPECTRUM: WITH CASE STUDY OF ANNA BARBARA’S ETHOS OF CARE Susan Yelavich	61
RICERCHE	GIANCARLO DE CARLO E L’ARCHITETTURA DELLA PARTECIPAZIONE Sara Marini	75
	ENVIRONMENT AND EMANCIPATION THROUGH DESIGN. AVANT-GARDE INTERVENTION AND EXPERIMENTS WITH SOCIAL DESIGN IN DENMARK AROUND 1970 Hans-Christian Jensen & Anders V. Munch	88
	DESIGN SOCIALE, MILANO ANNI ’70. GIANCARLO POZZI, IL LETTO D’OSPEDALE TR15 E IL SODALIZIO CON ACHILLE CASTIGLIONI ED ERNESTO ZERBI Marinella Ferrara	110
MICROSTORIE	LA STAGIONE DELLA GRAFICA DI PUBBLICA UTILITÀ: WHAT ELSE? Daniela Piscitelli	138
	RICCARDO DALISI AL RIONE TRAIANO. IL RISCATTO SOCIALE ATTRAVERSO L’ESPERIENZA D’ANIMAZIONE Susanna Parlato & Paola Salvatore	159
	CAMPO URBANO 1969. INTERVENTI ESTETICI NELLA DIMENSIONE COLLETTIVA URBANA Roberto De Paolis	179
	BRUCE ARCHER AND DESIGN AS THE THIRD AREA OF EDUCATION. REFLECTIONS FOR PROJECT-BASED EDUCATION IN BRAZIL João De Souza Leite & Cristina Cavallo	205
	LA DEMOCRATIZZAZIONE DELLA COMPLESSITÀ. LA DIFFUSIONE DEI DATI NEI PROCESSI DI DIVULGAZIONE DELLA CONOSCENZA Roberta Angari	215

INDICE

RILETTURE	"LO SCANDALO DELLA SOCIETÀ". RILETTURE SU PROGETTO, BISOGNI E AMBIENTE Raimonda Riccini	233
	DESIGN FOR NEED. INTRODUCTION, 1976 Christopher Cornford	237
	AHMEDABAD DECLARATION ON INDUSTRIAL DESIGN FOR DEVELOPMENT, 1979	240
	INTERVISTA A MALDONADO, 1986	244
RECENSIONI	THE SOCIAL DESIGN READER DI ELIZABETH RESNICK Gianni Sinni	257



Massimo Dolcini, *Grafica per la città*, poster, Comune di Modena, 1978 (courtesy of AIAP CDPG).

Microstorie

Bruce Archer and Design as the Third Area of Education

Reflections for Project-based Education in Brazil

JOÃO DE SOUZA LEITE

Universidade do Estado do Rio de Janeiro

Orcid ID 0000-0001-6221-4432

CRISTINA CAVALLO

Universidade do Estado do Rio de Janeiro

In this paper, Bruce Archer's thinking provides support for taking design as a field concerned with material culture and as a third area of education.

Taking Brazil as a territory, we believe that the complex structural problems still faced by the country today — of environmental, economic and social nature — are largely related to deficiencies in the educational system.

Furthermore, a specific type of education could lead the country to a process of solving those problems: a project-based education.

By affirming the importance of project activity in education in order to develop competencies and skills related to designing, building and getting things into production, we understand that such effect can be perceived in future generations. In socio-political terms, providing people with a greater capacity to deal with complex problems — technically better prepared professionals — can also benefit the industry economically.

KEYWORDS

Design
Design education
Bruce Archer
Brazil

1. Introduction

This paper is part of a discussion about design education in Brazil, and it seeks to demonstrate, in general terms, that this kind of education has received less attention than would be desirable. We believe that the highly severe social, economic and environmental Brazilian problems cannot be solved or understood in isolation by the *humanities* disciplines or by an acute scientific approach.

There is no doubt that these two areas of education, *humanities* and *sciences*, have built a solid body of knowledge over the centuries. However, disregarding material culture and disciplines that use modeling as a language keeps us away from a greater understanding of complex problems¹. Design education seems to be a very adequate approach to understand the nature of this kind of problems and certainly it can be a starting point to prepare future generations to deal with such complex situations.

Based on Bruce Archer's proposition of design as a third area of education, this article pretends to point out that the development of such an area could gradually provide society with fundamental skills and abilities when facing

complex problems. In a sense, skills and abilities related to reason and creativity which can provide greater autonomy of thought and action to individuals. For this, it is necessary to remove design from its common sense circumscription and bring it to a broader field. It is needed to remove it from an external and direct function of solving problems, from the single creation of objects for everyday use as an aesthetic resource, and face it from the perspective of a project discipline, a way of reflecting and acting in certain situations. Above all things, to be concerned mostly with a very special competency: on how to carry on problematization.

Richard Buchanan² presents design as a liberal art, which allows us to understand it in a broader sense. Paraphrasing designer John Pile, Buchanan says that design is a verb, not a name. We will understand here that the meaning of this verb is *to project* with high concerns, indeed. From this point of view, design becomes the field for the conception of all kind of things — from products, processes, services to systems. Thus, we take this concept of design as a broader field of knowledge, as a design discipline *par excellence*.

As a third area of education, design can also constitute a solid field of knowledge and research about material culture. And that, in addition to *humanities* and *sciences*, can provide a specific and necessary type of education: a project-based education. Such proposition, although not intended to solve the highly complex social and economic problems faced by Brazil, poses itself as one of the possible tools to achieve this objective.

Our hypothesis is that learning to recognize and understand the material world since childhood and realizing the ways it comes to life and it goes throughout everyday life, children can develop a more refined observation that serves them in performing activities related to the making. At the same time, when receiving the required knowledge to design and making things, they can feel themselves to be able to act on this world, building their own autonomy of thought and action.

We start here with a brief presentation of Bruce Archer and the Design Methods Movement. Archer's ideas, in the movement's context, were forged by a belief in the need of a nearness between design and scientific methods, not suppressing its artistic and creative aspect, but sustained it in a more consistent way. Then, we will deal with Archer's thinking about the need for an education that could cover the broad universe of material culture, a third area of education in addition to humanities and sciences. And, finally, we reinforce that to build and strength this third area of education is a way of providing people and societies with skills related to design and making of things, and

how these skills can contribute to our future, bringing more equity, justice, autonomy and well-being to a country like Brazil.

2. Bruce Archer and Design Methods Movement

As a youngster, Leonard Bruce Archer wanted to be a painter. However, he was considered a too bright student to continue with his studies in art. From the age of fifteen, his curriculum turned to scientific disciplines, fundamentally. An aptitude test suggested that young Archer should study mechanical engineering as, as a matter of fact, he did. After graduation, he started working in factories, designing models, tools and process maps. Then, in the early 1950s, he discovered a new professional possibility with the emerging profession — industrial design: that would be how he could be an artist and an engineer at the same time.

In those days, design was facing new challenges, related to industrialization and mass production. The problem solving idea was too limited to define professional practice and all about methods also needed to be rethought.

Design Methods Movement presented itself as a new approach to design process, which then began to organize itself, influenced by the profound technological changes in which the world had been going through, including automation and computing's emergence.

Methods assume a systematic process for designing things. They consist of tools (such as drawing, brainstorming, prototyping, mind maps, flowcharts, amid others) and comprises three essential phases according to Archer: analysis, creation and execution.

By bringing his knowledge and experience as an engineer to design, Archer created bridges between art and science, between creativity and methods, contributing greatly to consolidate the field. Already in the 1950s, his research pointed out in direction of a greater systematization of design process. From 1954 on, he wrote several articles for the Design Council's magazine — *Design* — at that time still known as Council of Industrial Design³. In those articles, he reinforced the importance of a balance between creativity and a deeper technical knowledge for industrial designers, what he used to call a "rational approach to design".

A focus on creative action and a search for balance between art and science has guided Archer's entire professional life, as a designer, a professor and a researcher. Invited by Tomás Maldonado, he worked as a visiting professor at Ulm School of Design (*Hochschule für Gestaltung Ulm*), from 1960 to 1962. He was also among the founders of Design Methods Movement⁴, with engineer John Christopher Jones and architect and mathematician Christopher Alexan-

der. Still in the 1960s, Archer was Sir Misha Black's assistant, teaching at the Royal College of Art, maintaining his purpose of establishing research with a focus on creative action associated with scientific and methodological studies, as a basis for developing a design discipline. Between 1966 and 67, he participated actively in the creation of Design Research Society.

In the beginning of the seventies, Design Methods Movement became a target of criticism from some of its own exponents, such as John Christopher Jones. Nevertheless, reflections raised by the movement were, and still are, at the core of studies in design field. Design Methods Movement and Design Research Society were fundamental for establishing design itself as a discipline with a consistent corpus of methodologies and research, capable of sustaining professional practice and education. Bruce Archer was a key player in this whole process, as he reinforced the importance of bringing creativity and scientific methods together in search for innovation, for a better problem understanding and solving problems.

In 1971, Archer started a new phase in his career, dedicating himself more directly to design education, as coordinator of his own department at RCA, Design Research Department. With a research program entitled Design in General Education, Archer and his team sought to diagnose the way in which design and crafts were embedded in British secondary education. Remarks generated during this research grounded the theory that interest us here: putting design as a third area of education.

3. The Three 3 Rs, Bruce Archer's Great-Aunt and Design as a Third Area of Education

The 1970s and 1980s were particularly difficult times for English people, because of a strong economic recession and high degrees of unemployment. These difficulties encouraged the organization of the Design Education Movement, as a way of creating awareness in design. The goal of this movement was training students to be conscious consumers, capable of evaluating the aesthetic and functional quality of products and, in addition, to prepare future professionals in the activities of conceiving things. The intention was to strengthen British industry and product, facing imported products and heating the national economy.

The requirement to think about new forms of consumption and production responded to an urgency of dealing with a scarcity of resources, pollution and environmental damage, and other problems that could no longer be ignored. It was essential, therefore, that children and young people should be educated for a new behaviour, for a new way of consuming and producing material culture.

In 1978, Bruce Archer claimed that a "time for a revolution in art and design education" had come. According to him, material culture, which brings together all human activities that result in products, should be observed, classified, given a conceptual coherence and put, finally, towards a new and broader field in terms of education and research. For Archer, intellectual life of all Western society had been divided between two main cultural languages: humanities and sciences. And this division into two dominant cultures has been the main obstacle to world problems solving, since these problems, of ecological nature and of life quality in cities, require a certain competence with a high level of awareness over material culture issues. In other words, letters and numbers are fundamental, but they do not take into account the necessity of skills related to making and, so, human capacity to understand and solve complex problems stays incomplete.

This division has been instituted in European education between 14th and 18th centuries, because of guilds' decline and the rise of universities. Guilds, which were responsible for educating people until the Renaissance, preached principles related to reality, ethics, skill and economics, stating that a virtuous education consisted in learning what is practical, good, understandable and sufficient.

Guild education took place empirically, through experiences related to crafts and tacit knowledge. The creation of universities, based on training of religious men for reading and translating sacred scriptures, placed education on a much more theoretical than practical level, privileging, firstly, the humanities, then the sciences and, finally, technical knowledge. This has been, to a greater or lesser extent, the basis of Western education until today, presented explicitly by the expression three Rs⁵.

However, for Bruce Archer, these three Rs would actually be just two, since *reading* and *writing* are two sides of the same competence: *letters*. *Reading* is the passive competence and writing, the active one. In short, it's only about *letters* and *numbers*.

Curiously, Archer reports that he had an old great-aunt who protested whenever the expression three Rs was mentioned. She used to say that this thinking was wrong and to correct him by claiming that the three Rs should be *reading and writing, reckoning and figuring and wroughting and wrighting*. *Reading and writing* are related to *literacy*, the ability to understand and express thoughts and feelings through words. This competence originated and developed the entire range of disciplines that constitute humanities field. *Reckoning and figuring* form the field of numbers. It's the ability of understand and express ideas through mathematical language, and support all

scientific disciplines. The turning point for Archer's thinking about design education lives in the concept of *wroughting and wrighting*, presented by his great-aunt, and the conclusion this concept evokes.

Wroughting refers to the understanding of production of things, which, updating, Archer presents as technology. And *wrighting* is about *how to produce*, the development of necessary technical and handicraft skills to produce things. However, according to Archer, there was no word able of naming the experience of understanding and producing material culture equivalent to humanities or sciences, which define the universe of letters and numbers, respectively.

What he deduces is that there is a third area in education, related to activities of making things and conceiving things. Not a new idea, according to his own words, recalling the path that connects William Morris to Plato and the fact that knowing and understanding societies through material culture had already been widely used by anthropology and archaeology. Thus, we can't ignore the world of artefacts and all the experience, sensitivity and skill contained in their production and use.

According to his proposition, if sciences are the body of theoretical knowledge, based on observation, measures, hypotheses and tests, and humanities constitutes the body of interpretive knowledge based on contemplation, criticism, evaluation and discourse, the third area is the body of practical knowledge based on sensitivity, invention, validation and execution. Sciences and humanities are in the world of learning, and the third area, in the world of action, in two aspects: operational arts and creative arts.

This third area could be called *arts*, but this term has been used for a long time as a synonym for humanities. Archer named this third area *design*, inspired by demands of teachers in English secondary schools, who believed in relevance of an education that was able to face the current problems of the world.

Designing's main language is modelling. Humanities' language is writing and science's language is mathematical notation. Modelling includes creation of models, like sketches, technical drawings, schemes, models, prototypes and all sorts of resources capable of representing one project in a concrete way. It resides in the action's field, being therefore a language of making, which is made possible by education and practice of hands connected with the brain, developed basically through drawing and crafts (Sennett, 2015).

We can deduce that, more broadly, the lack or even the non-existence of an education of this designing language affects the development of skills related to thinking, to logic, to order, to mathematics, geometry, spatiality, drawing,

sculpture, architecture, construction and engineering, for instance. And this is one of the main flaws in Brazilian education.

4. Brazilian Social Formation and Design

In Brazil, fundamental and high school syllabus have not any discipline of design, of crafts or even technology. In the history of our country, very little or nothing has been done to systematize an education focused on the knowledge of making. On the one hand, because of limited investments in education, in general. On the other hand, because, throughout our history, craftsmanship and any type of manual work have always been deprecated as a minor activity, as some sort of low income classes work. It derives directly from our social constitution. Besides all that, the second major industrialization cycle in Brazil⁶ — of the secondary kind — was more committed with international interests that guaranteed the dependence on imports of manufactured products. As said, very particular sociocultural aspects of the country contribute to the rejection of all technical and manual activity. Almost four centuries of slavery left profound marks in Brazil. Among them, a progressive departure from making as a legitimate form of physical and intellectual work, a disconnection between head (mind) and hand, where mind was a privilege of the colonizer and hand was the only right of the poor and oppressed classes. These historical and social aspects reveal what Richard Sennett called “a critical point in training’s problem”, one where head and hand are not only intellectually separated, but also socially (2015, p. 57).

In colonial period, extractive policy was not concerned with promoting any training for land's natives, even less for enslaved black people. The principle was pure and simple exploitation, of natural resources and of workers. At the same time, for landowners not making or producing anything with their own hands was a reflection of their supposed superiority. Young men were sent to universities to become doctors or lawyers, reinforcing an exacerbated valorization of erudite knowledge, to the detriment of technical and manual knowledge. The mechanical arts of Brazilian colonial times were structured in a few craft corporations where artisans were generally aided by slaves. With that, the apprentice condition, essential for the constitution of future craftsmen, knowledge's transmission and survival of artisanal system, got lost (Prado, 1987). Portuguese crown did not promote manufactures in Brazil, and even, for a long time, prohibited the creation of workshops and factories. The country arrives in the 19th century still far from an industrialization process, with a slavery based economy, dependent and colonized, without a consistent manufacturing history. This situation gets worst in 1808, with the arrival of

the Royal family and the decree to open ports, which significantly increased import of foreign products.

At the turn to 20th century, with the end of slavery and the emergence of a Republic, Brazil's slow and late industrial development began. Profits obtained from coffee exportation financed the establishment of industries, especially textiles and footwear, in São Paulo and Rio de Janeiro, based on labour force of European and Japanese immigrants arriving in the country.

Brazil reaches the 20th century in a succession of mishaps, interruptions and gaps that prevented us from building a consistent artisanal knowledge. And handicrafts, which never came to be developed in the country, were then hit hard and definitely with the beginning of industrial development. According to Lina Bo Bardi⁷, Brazil was forced to face the problem of industrialization directly, since artisanal corporations do not enter its historical complexion. For the Italian architect, our country had a pre-craft, small and sporadic informal productions composing an artistic activity that expresses and materializes popular culture (Bo Bardi, 1994), unlike the solid European handicraft tradition.

The absence or precariousness of artisanal and technical education compromises the country's industrial and cultural production, since society does not receive an education to design and build which is able of meeting internal needs of economic and social order.

What interests us is to think about a kind of education that is, in some way, related to work, to crafts, to know-how. Unlike passive education, an education that involves the making and values different forms of learning through experiences of ideation, of dealing with materials and building things. Our question is: how this education can act in favour of a greater social and economic development in Brazil?

Bruce Archer offers us the possibility to reflect on the existence of another area of education, in addition to letters and numbers, related to the understanding of processes of building things and the ability to build things. This area can be called design. In this way, it is possible to plan a new education for the future, based on learning skills that develop the ability to think, design and make things, aiming at the country's economic and cultural development, without giving up environmental and social awareness necessary for improving living conditions across the planet.

Design as a project field can lead the studies toward a new education that integrates this third area. In fact, the field of design, comprising education, professional practice and research, is the only one capable of developing such a project, as a guarantee of its own existence and development, as well

as for the construction of a collective conscientiousness able to deal with future challenges.

Our hypothesis is that activities related to designing and making things can act on a person, giving him or her a greater capacity to think and act. And that this ability allows people to act more autonomously, in terms of thought and action, in the social, political and economic spheres of their own lives. It is very clear that problems faced in Brazil, of political, economic, environmental and social nature, cannot be solved from such punctual actions as the insertion of content related to design and making in educational systems. However, it is also undeniable that the necessary changes must pass through education. Only education has the power to propagate concrete changes on a large scale, even in the long run, as it operates across society. And, considering that Brazil has never been a project-based education and that such an education can start a process of awareness about the material world and the making of things, this seems to be, at least, the first step on a path that aims at transforming our condition of dependence.

5. Final Considerations

What we intend here, albeit briefly, was to gather arguments about the perception of design as a third area of education and as a field of research and professional practice able to presenting itself as a possibility to deal with complex problems. Our intention is that such arguments can support a broader discussion about the need for a project-based education in Brazil, through design.

The experience of artisanship making present in design education involves aspects such as creativity, dedication, logical reasoning, discipline, technical quality, materiality, culture, aesthetics, form, among others. In addition to humanities and sciences knowledges, design education may constitute an important tool for people's conformation in the sense of reinventing their own reality and thinking and building with greater autonomy.

Thinking about a project-based education for Brazil is an endeavour where disciplines such as history, pedagogy, economics, social sciences and economics intersect. In a multidisciplinary situation like this, we believe that the design field has the necessary tools to meet the training needs of children and young people in terms of understanding and solving the structural problems that plague the country.

We hope that this paper works as an opening for this discussion, enabling future research to develop projects for educational systems that consider the third area of education — design —, as a necessary approach to the training

of children and young people who will face increasingly complex problems. In the case of Brazil, specifically, an education of this nature can be considered as a tool for the technical, economic and social development of the population, leading us to observe and act on project problems that usually reinforce our condition of dependence and, doing so, being able to change it into a preferred one.

REFERENCES

- ARCHER, B. (1973). *The need for design education*. Professor Bruce Archer Courses in Design Research 1976-77, Module 1, Seminar 1: *What are we doing here?* [unpublished lecture notes].
- ARCHER, B. (1978). Time for a revolution in art and design education. *RCA Papers*, (6), 4-8.
- ARCHER, B. (2004). *Autobiography of research at the Royal College of Art 1961-1986* [notes written for the Rector, Professor Sir Christopher Frayling, at his request in March 2004]. L. Bruce Archer Archive, Royal College of Art, London.
- ARCHER, B. (2005). *Framework for design and design education: A reader containing key papers from the 1970s and 80s*. The Design and Technology Association/Loughborough University of Technology.
- ARCHER, B., BAYNES, K., & ROBERTS, P. (1992). *The nature of research into design and technology education*. Design Curriculum Matters Series. Loughborough University of Technology.
- BAYNES, K. (1967). *Industrial Design & the Community*. Lund Humphries.
- BO BARDI, L. (1994). *Tempo de grossura: o design no impasse*. Instituto Lina Bo e P.M. Bardi.
- BUCHANAN, R. (1985). Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice. *Design Issues*, 2(1), 4-22.
- BUCHANAN, R. (2001). Design and the New Rhetoric: Productive Arts in the Philosophy of Culture. *Philosophy and Rhetoric*, 34(3), 183-206.
- PRADO JR, C. (1987). *História Econômica do Brasil*. Editora Brasiliense.
- RITTEL, H. (1973). Dilemma in a General Theory of Planning. *Policy Sciences*, (4), 155-169.
- SENNETT, R. (2015). *The craftsman*. 5th ed. Record.
- SOUZA LEITE, J. (2014). Which things first? uma proposta pedagógica que inscreve o dado histórico, social e econômico na discussão da forma. *Arcos — design, cultura material e visualidade*, 3, 64-83.

NOTES

- ¹ Somehow, this idea of *complex problems* is related to the concept of *wicked problems*, coined by Horst Rittel, in 1973. Rittel's wicked problems are difficult or even impossible to be understood and solved directly due to contradictions, mutability, to the incompleteness and the profound interdependence of its aspects. In the same way, complex problems contain a variety of factors that make them impossible to be understood from a single perspective. It's necessary to make use of different fields of knowledge to look at them and accept the fact that entering their universe requires to face other problems and situations that are constantly changing while interrelating.
- ² Philosopher (University of Chicago), professor of design, management and information systems at Weatherhead Business School/Case Western Reserve University, and editor of Design Issues magazine, Richard Buchanan has been dedicated to propose, so to speak, a philosophical theory of design.
- ³ "The Design Council began as the Council of Industrial Design in 1944 and had a key role in the Britain Can Make It exhibition at the V&A in 1946. It changed its name to the Design Council in 1972. The Council's magazine Design was published from 1949 to 1999." (<https://www.drs2016.org/exhibition>)
- ⁴ In 1962, *Conference on Intuitive and Systematic Methods in Engineering, Industrial Design, Architecture and Communications* takes place in London, which is usually considered the starting point of Design Methods Movement.
- ⁵ Although the expression is usually attributed to a speech given in 1795 by Sir William Curtis (1752-1829), an English businessman, banker and politician, this origin has been contested by some publications. These same skills already stated by Saint Augustine: *reading, writing and arithmetic*.
- ⁶ The first Brazilian industrialization cycle — composed of primary industries — in the 1930's was mainly directed to processing raw materials.
- ⁷ Lina Bo Bardi (1914-1992), Italian architect, arrived in Brazil in 1946, with her husband, journalist Pietro Maria Bardi. She developed important modernist architectural projects, especially in São Paulo, such as the São Paulo Museum of Art (MASP), SESC Pompéia, the Glass House among others. In the country, she cultivated great admiration for popular culture, which has become one of the main influences of her work. She also worked in Bahia, in restoration projects and in initiatives related to art, crafts and design education.

OLTRE LA NORMA

HANDICAP ED EMARGINAZIONE SUL PICCOLO E GRANDE SCHERMO

Rassegna internazionale Pesaro 25-30 marzo
Cinema Loreto/Teatro Sperimentale "O.Giansanti"

Comune di Pesaro
Assessorato alla Sanità
e sicurezza sociale

Patrocinano
ACLI / AIAS / ANFFAS /
1000 bambini a via Margutta /
Punto più / FISHA / MPD - Tribunale
dei diritti del Malato
Provincia di Pesaro e Urbino /
Regione Marche

Collaborano
RAI - Dipartimento Scuola
Educazione / UNICEF - Comitato
Italiano per il Fondo delle Nazioni
Unite / Ambasciata d'Australia

Partecipa
Amnesty International

Presidente Onorario
della Rassegna
CESARE ZAVATTINI
Presidente
Nelio Risi
Rassegna a cura di
Paola Severini
Consultenza tecnica
Agenzia PAN

Sponsor
Amici del pugilato "O. Vitarelli"
Belligoni Industria Mobili
Automotorsport
"Santa Monica"
Berloni Mobili
Fratelli Cucine
Libertas Atletica
Cucine Componibili Nicolini

Metauro Mobili
Moto Club "T. Benelli"
Moto Grandprix Parisienne
Bairme Mobiliificio
Scavolini Cucine
Victoria Libertas Basket
Impresa costruzioni Palazzetti
Vis Pesaro Calcio
Gentili Pellicceria



Massimo Dolcini, *Oltre la norma*, poster, Comune di Pesaro (courtesy of AIAP CDPG).

AIS/DESIGN JOURNAL

STORIA E RICERCHE

VOL. 7 / N. 12-13

DICEMBRE 2019

GIUGNO 2020

**SOCIAL DESIGN.
DESIGN E “BENE COMUNE”**

ISSN

2281-7603
