

Inventing Money in Brazil: From Real Plan to Creative Currencies

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I – Price Stabilization, Structural Reforms and Income Distribution

From 1994-96 to 2014-16, about 21 years of a truly democratic transition out of military rule, the Brazilian economy has evolved from price stabilization to structural reforms and income distribution as a full circle.

The cycle seems to be renewed now, as a major political and economic crisis marks what seems to be the turning point “back to the future”: the fundamentals of price stabilization and structural reform as requisites for a future resumption of the income distribution quandary.

The contradiction between stabilization and structural reform has become a classic in the economic literature, since the Real Plan (1994-1996) it was clear that it is not possible to stabilize without transformations in the structure (Schwartz, 1990).

The monetary stabilization aimed at in the 80s became an early democracy highest stake: to be met under the provisions of the 1988 Constitution, postponing for as long as economic growth and social inclusion through consumption could go the “real” challenges of structural reforms capable of collectively re-designing the income distribution and class struggle tensions that continuously press over the old economic structure entering an age of complex regulatory frameworks, political agendas and digital governance of the new global power structure (the biopolitical spheres).

Power, income and representation structures are in contradiction to the short term gauges and metrics which govern over monetary, fiscal and financial policies in Brazil.

Slow political change thus constraints economic development. Social tensions are further stressed as short term policy tools are the only resource available: interest rates, exchange rates and complex fiscal regimes play as if capable of designing the absent or non-existent development project. A structure without project. An empty significant.

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The currency name as expressed in a project is in itself the playful alienation of the open conflict: Real. The real conflicts, however, are disembodied and ignored, they do not show up in the social radars led by government policies. The reality of the “Real” is its ability to substitute the hegemonic narrative for the real distributive conflicts. The Real is not real, it is imaginary and regulated so that the open nature of the structural conflicts may be dealt with through short term projectless economic policies.

The invention of the Real currency, however, while bypassing the real conflicts that would require the economic, political and symbolic structures of Brazilian society to change dramatically, favors nonetheless the options of the dominant elites.

In short, there has been real change despite the eternal return of the promised structural reforms. Real social, economic and ideological change in Brazilian society.

Maybe the eternal reinvention of a national currency becomes a project in and for itself, imposing structural limits to the nature, direction and depth of successive slow, gradual and safe changes. This was the motto for the military regime’s rule of the game: Brazilians were to endure a slow, gradual and safe opening towards democracy. The gradualism required the final dictators in the mid-70s to be “populist” by relaxing inflationary and public debt controls, so that democracy came along as a result of bottom-up resistance and campaigns as well as from the accommodating policies of the Brazilian State in the safe road back to democracy.

Democracy under inertial inflation becomes a burden as the international oil and debt crises unleash the global economic crisis of the early 21st century. Brazil is not the only policy experiment towards the reinvention of social conflicts mediated by an icon of collective value and recognition: the euro represents a much longer process of economic convergences halted by the real nature of geopolitical and social conflicts.

At the end of the day, the success of monetary stabilization in Brazil or any other country in the Periphery of the world system depends on structural reforms that became a renewed global condition of connectivity to the Center.

Connectivity is not enough, but the ability to connect to the sweet spots of global economic growth while integrating into major geopolitical trends underlie each and every currency at the national, international or supranational levels.

In order to fully apprehend the nature of this global monetary and geopolitical change, the connections between structures and policies require a new understanding of the social and economic “assemblage” tools and forms of judgement.

Moreover, from a social and demographic perspective, there is an emergent Brazilian middle-class in mid-sized urban centers (beyond the larger capital cities) as well as the opening of new economic frontiers and opportunities which reinforce the need for more real estate development financing.

II - The Iconomic Turning Point

The theoretical issues related to cultural diversity in the digital era always work on some established view, a certain *Zeitgeist* or structural hypothesis about the changes related to the digitization of life. We are lively and continuously connected to social networks and meshworks that not only reproduce social patterns embedded in people's behavior (there is no sense in viewing any technology as existing without being 'social') but also open free or idle spaces, empty signifiers, times and multitudes to reconfigure the world and impose new forms of thinking, behaving and playing.

What will be left of Humanity if the next big wave of the internet focuses so bluntly on the "things" and we humans are biopolitically dependent on machine to machine communication? These robotic infrastructures are free, open, collective, collaborative, constructive? What are the rules of the game of reinventing rules, worlds and fantastic universes?

We are invited into a new round of spectacular, conceptual, anthropological updating of the inherited critique of technical and instrumental rationalities.

The global digital networks are themselves expressing and showing us into new forms of creative resistance to automation, work impoverishment and alienation by unsustainable consumption carried out by an endless and bad infinite, typical of machinic, schizophrenic and dismal spirits.

Discussing the current bioepistemological turn - which I call 'iconic', it is as a new forms of being, beyond Being and actors in networks, are on their way to establish an **Iconomy**.

A full account of the theory of value associated to the monetization, gamification and immersion of digital icons would take more space than we have available here. As we move beyond State and market weaving through digital infrastructures and soft assemblages, it is necessary to continuously review the digital impacts on this new bioepistemological sphere. As in any policy-related, strategic roadmapping fueled by innovation, impact is path-dependent on the quality and density of targetting for a collectively designed, diverse and democratic digital culture.

Digital networks invite us to think differently as well as to think out the difference, the risk of suppressing the diversity, and the emancipation potential into new dimensions of the organization and the culture.

It is a theoretical and political concern of the highest level, as saying that the human being must think differently does not mean that we need to perform any kind of surgical or pharmaceutical intervention to produce a post-human brain. The brain is the very same that has served us since *Homo sapiens* emerged. The individuals will walk, ride on horses, in wagons, automobiles, rockets, or on planes; however, the brain structure and the cognitive skills are those that have always been with us.

What changes is the about-yourself-thinking relation, that is, our capacity of critique and self-critique, of thinking as an individual and collective subject. This has been a research theme that has gained strength in universities and independent research groups worldwide. There is a talk already of some "Science of the Internet", and not only the Technology of the Internet. Science has demanded new research procedures since Internet appeared.

And, if the practice of science is changed, the research techniques are changed; the epistemic-nature challenges are put forward and renewed as well. Possibly, we will come to the conclusion that the reason why we think has changed. I will quickly go over the characteristics of this thought transformation that shows why some science of the Internet more and more makes sense.

In western thinking, one characteristic is the Cartesian *motto* that eventually sums our society up: "I think, therefore, I am". This is the basis of the entire modern science. I refer to the Enlightenment period, in which the insertion of the individual in the world has to do with an individualistic thinking.

The ego asserts itself with the ability of controlling existence from its own thought. It is a strong change as related to the previous periods, marked by the religious or mythical thoughts. We move on to a rational thinking, no longer a magical thinking, but an instrumental one, through which the individual dominates the world.

When we talk about Cartesian diagram, geometry, calculus, we celebrate the individual's ability to make mental operations called thinking with a view to an end, and existence is translated within the rational relation between means and ends.

What changes with the digital networks, generating both positive and negative effects, is the prevalence of communication/language upon all processes.

If the individual subject's thinking continues as important as it has even been to humankind, if it is still as important as it was for Descartes to state that the basis of our existence is our capacity of thinking, new metaphors that should protect the brain anatomy for supra-individual dimensions have emerged. Thus, as the brain performs synapses, not only a connection among neurons, but the neurological net that each of us has inside our body, a propagation of synapses

starts happening in the world going beyond the individual body – now there are millions, billions of people connecting themselves. What does that mean? This collective and connective thinking? Does it constitute a new kind of subject, or does it ask for identities that escape from the Cartesian subjectivity? This is the first provocation.

It is true that individuals connect to one another, cooperate, have friends, and participate in 'social nets'. However, besides the random or circumstantial connections, does a structure or an organism stand out? What sort of "thing" is the "net-actor"? And to what extent is his ontology (or, "ontopower") diluted in processes, tracks, folds, trace elements, and resistances to an authentically diverse, free, and creative culture?

Spontaneous demonstrations that today keep the digital humankind informed and the digital studies of the culture are equivalent to the practical belief that maybe a collective brain, an intelligence that connects itself, a unit that fulfills itself only within the difference it has within itself – that, therefore, challenges the classical notions of identity and subjectivity – Is this being formed within us and in spite of us?

Such [id]entity, rather abstract, is emerging but with which we have been dealing with, and the nature of which is dynamic and collective but singularly individual, for it is digital, trackable, and sharable.

This social and technical transformation shakes Cartesianism up as well as our sureness that from what I think I generate a result that I have a control on. The new form of making science already reflects the existence of a self-conscious digital superstructure. How does it think? Certainly, this is a communicational thinking (I communicate, therefore, I think) and not an existential thinking (I think, therefore, I am). If I do not communicate, if I am not connected to a dimension that emerges beyond the individual intelligence, I am no longer so powerful.

A second characteristic has been the emergency of the big data (and the new convergences between the information science and the digital humankind) lately. It is the output of this gigantic global brain that is ceaselessly producing information.

In other words, it is the set of extremely huge data that, for this reason, requires especial tools (metric and metadata) in a way that all and any information can be found, analyzed, and usefully seized in a timely manner.

This collective intelligence leaves tracks, traces, memories. Sometimes, they are tracks that the secret service will eventually examine, but in the case of the University we are not dealing with espionage but researches about the citizenship future that transforms itself into a citizenship literally made of knowledge about informational clouds.

The patterns that will emerge from there will be patterns that will only possibly be visualized if there is such connection, not only the digital with the real, but all the areas of the real with all the areas of the digital mediated by new models of mapping the world, the consciousness, and the communication itself.

Therefore, it is a hard-to-implement, holistic-nature challenge, even because our universities and research centers are the legacy produced by a Cartesianism that has generated an extraordinary epistemological segmentation.

Each individual asserts itself as a powerful subject in the extent that it takes ownership of specific knowledges produced in the schools of economics, law, engineering, medicine, and so forth.

It has been immensely difficult to create interdisciplinary universities and programs that should unite several universities in consortiums. But it is already happening. Therefore, the way to produce knowledge and share results in science is changing. The very belief in individual rationality loses strength and reveals itself more and more like a belief not like a reason.

Finally, this big change that is perceived as an emerging internet science is the overcoming of the positivist, determinist, casual, and mechanical model in favor of a [re][ac]knowledge[ment] of all that is imaginative, affective, and sentimental. And passion is indissociable from the communication process (love is, too, always with [com]passion). The iconic turning point is also part of an affective, post-semiotic turning point.

[Re][ac]knowledge[ing] with [com]passion is a paradigm change, since in Cartesianism, in Positivism, and in the determinist and mechanical viewpoint of the things, the proven established cause is empirical and unequivocal. With the nets and with this kind of collective communication, the affective dimension gains importance not for the connecting engineering per se, but because the connectivity goes on generating this new brain, this collective passion.

The Internet does not exist only because we are connected, but because it is an audiovisual, interactive, and immersive interface, mobilizing the rational side but the feelings as well, the sensibility with which we see and listen to ourselves and the others (it is more difficult to ignore the distant war, the remote genocide, the epidemics, and the environmental pollution of other people).

Besides the passage from the controller-subject to a collective-connector, besides the overcoming of rationalism and technical affectivity towards an affective and sentimental technology, a third great transformation is ongoing, and it possibly gives sense to the two former ones: when we talk of the Internet, we talk about connection and interest, as well as of icons, distant objects with which we sometimes have an even religious relation, I would say, in the extreme of a sensorial affectivity (everything, perhaps, should have started with the emoticons ☺).

It is rather common to see mega-businesses emerging and practically monopolizing the market (por example, the social networks) and that seem to have discovered an engineering magic combination – producing market leadership phenomena that prove how much technology is charming. But it does not charm because someone performed some magic and a wonderful entity appeared, but because it is the nature of this communication process to integrate the most advanced engineering and iconography into digital design prodigies.

The internet has a technical dimension, but an audiovisual, iconic dimension as well. This engineering audiovisual connection is what gives it a new meaning that seems ghostlike. How can we give meaning to the objects, the decisions, or to our new relations other than through objects that are advanced technology and advanced affectivity at the same time?

III – Iconomy and the new theory of (digital) value

From these changes, a new Science of the Internet arises. This new manner of thinking, playing and making, subject to dialogical critique and self-critique narratives, into which we give ourselves up, but also against which we hold out, since we need to be seduced to make new measuring and feeling models feasible, is what I have been calling an ***iconomy***.

The word economy comes from the Greek term *oikos* (house) and *nomos* (custom, law), denoting the administration of the house, home. Domestic economy has always been the economists' favorite metaphor: you shall not spend more than you have; you need to know how to adjust the means to the ends, etc. This is the classical paradigm of the Cartesian equivalence between supply and demand, which takes us to the expectation or the confidence in the existence of a balance price – everything very objective, mechanical, and determinist.

Iconomy shows us into an unprecedented universe: we are no longer related only to the rules of the “household management” (or, the business, the public accounts, etc), but to the rules of managing icons. The social networks produce reputation, affectivity, dialogs. This must be expressed, represented by icons; starting with an icon, such as, *like*, the quickest way to share contents in social networks.

Thus, beyond price or pricing, we are entering a dimension of appreciation. Obviously, there is pricing. In the supply-demand relation, at some point, the buyer and seller come to an agreement over some price. But in the Internet, in this ***iconomy***, the *nomos* is defined by the icon, by something that is tangible, which is a visual, immaterial, real, and symbolic code at the same time.

In brief, we are just in the beginning of a profoundly renewing form of working with dualities that have always tormented the human soul – objective and subjective, individual and collective, symbolic and real, imaginary and factual, effective and affective.

Such dualities and antagonist poles start to match, and contradiction becomes composition. The main characteristic of this new way of thinking, acting, and measuring – combining the technological with the audiovisual and emotional – means interactivity, which, within its several levels that are being achieved with the new technologies, is the major characteristic of this cloud. Meanwhile, and literally, a cloud, or something somewhat diffuse. And the main characteristic of interactivity can be summarized in other words: the ludic acting.

The **iconomy** emerges, above all, under the shape of a “ludic age”. Interacting is connoting the idea of playing. I summarized this emergency in the title of my book: *I play, therefore, I learn*, as opposed to *I think, therefore, I am*.

The work summarizes what the **iconomy** brings on as a contribution to this innovating way of thinking, measuring, and feeling. Learning is the act of being permanently renewed. This reopens the research, the reflection, the practices for the companies and individuals, for rebuilding the world from a perspective not only instrumental but that, on being eminently communicational and drawn out through the nets, is interactive and immersive, therefore, ludic. This is the underlying reason for gamification to have become a buzzword, a fashion word, in the last years, also in the educational field, in business management, and in public policies. However, is it just a fad?

Today, it is becoming clear that the Internet is not just an engineering artifact, is not just an instrument to enlarge the scale of economic, social, and cultural actions. All this, in fact, results from its extraordinary engineering. But the news is that this **iconomy**, messing with our way of thinking, measuring, and feeling, looks like a play.

It is certainly not trivial to define “play”. Play is also experiment, creation. If we access the term *gamification* in the Wikipedia, we will see that it refers to something very simple: apply the dynamics of the game to any other thing that is not strictly a game.

Behind this simple definition, there is a lot of polemics, because, after all, what is a game? What is a competition? What is a play?

There are innumerable ways of approaching this ludic characteristic that is behind what we call gamification. If you go to a snack bar and you see a board where you read that some employee won some sort of recognition, this is a form of game. Gamification, in this case, means stimulating a competition among people to see who the best at this or that is.

IV – Creative Currencies: Monetization and Gamification for the Internet of Things.

I do not want to advocate for some alleged moralism against the entertainment industry, and especially, against videogames. This is a segment of the hegemonic creative industrial market that needs no subsidies or advocacy. The big companies are earning billions, more than the traditional audiovisual industries such as film. But, what about the gamification of education? And the gamification of social relations? What are the new audiovisual frontiers in the internet of things?

Furthermore, the monetarization of the games starts to be an object of observation. Basically, we could conceptualize the *game* as monetarized social network; perhaps, the most concise way of defining what game means in the Internet. Of course, the Facebook has already got its own form of monetarization. How many people have clicked *like* in my post? And that can be measured. When the *likes* increase, you say, “Wow! A lot of people liked this!” Sometimes, you post something and nobody says anything. “Strange! Nobody liked that!” This is a form of

monetization, i.e., transforming a chain of meanings into a chain of values as from narrative clusters or local, real, and/or virtual creative arrangements.

Monetization is extended as an attribution of values or appreciation over something. Not only the coin pricing that have we used, but an appreciation, a sign of appreciation. More and more, this fantastic synergy between socialization itself and some mechanism of gamification that, ultimately, is to create a coin, an index, a representation of what is appreciated, can be found in the net.

This has a price, too. Concerning Facebook and other social networks, mainly in the case of games, new coins are already being used, including virtual coins within the game itself. This has been happening for quite some time already. More recently, this monetization dimension of the nets has gained great evidence with the *bitcoin*, a coin of which creation and transfer are based on cryptography protocols and are independent of any financial institution.

This is some urgent border, but that takes a long time to arrive at the highest bodies of our private and public financial institutions. For some time now, I have been insisting on this possibility: making a social game, a game for change, for the net monetization, to stimulate the appreciation of culture, education, entrepreneurialism, citizenship, using a monetary indicator that I call “creative coins”!

The project has already been awarded prizes and selected in public notices of the Ministry of Education and the BNDES (National Bank for Economic and Social Development). It is a gamification of financial education that will teach young people how to deal with the processes of valorization and to engage themselves into creative processes, being remunerated with a coin created for this purpose. Cultural, technological, and monetary management challenges have become a question of communication, memory, and identity in this model.

What is the “ballast” of these coins? One possibility is for the IRS (Federal Revenue) to use the arrest of illegal goods as ballast for these creative coins. Part of it is destroyed and the other is auctioned, generating more income for the Federal Revenue itself, while a small part is donated.

Why not increase the Lion’s* share contribution to a positive social impact using part of the apprehensions as ballast for currencies that will be the circulating in social networks designed collaboratively for creative projects?

(**Lion*, as popularly said of the organ responsible for tax collection in Brazil).

During the event *Rio+20*, this project was UNESCO’s standout. It is an ambitious project, but with a slow and complicated development. I find that creating a new coin that should involve the Federal Revenue, the BNDES, and Banco do Brasil is something that would have to count on the assistance of the presidency of the Republic to happen. The mission of a professor or a researcher is to stimulate reflection, but the action depends on the collective intelligence, too. Maybe, it is really a border where it is more necessary: the reinvention of the coin and the exchange as from the culture and communication mediated by the digital networks.

Both private and public organizations that can afford to make this happen need to face the challenge of integrating themselves collectively into a creative intelligence.

In short, why monetarize the net creatively? Can we “play” with the very concept of money? Reinventing the money using the technologies of the social nets can also be, *de facto*, a path to reinvent our engagement to the transformation of the world.

After all, money is nothing more than a representation of values. If, besides the money that serves for pricing, we could invent some money that we should have appreciation for, I believe that one complements the other and society eventually wins.

With the creative coins, the financial system itself can be the protagonist, as vanguard, of the emergency of this new *Iconomy* ludic order.

V – Digital Currencies and the Theory of Value: Concepts, Technologies, and Practices.

The essential *locus* of this emergency of the *Iconomy* is the core phenomenon of monetary creation. However, the object is approached as from an interdisciplinary perspective anchored in the engineering of softwares, communications, arts, and humanities, mainly because the testbed for issuing and circulating “creative currencies” will be centered in the financial innovations and the technological entrepreneurialism within creative industries (solidary economy and culture economy), with strong impacts expected onto the field of civil rights and the borders of economic and political citizenship.

It is the act of rethinking the theory of value as from a historical and epistemological review that dialogs with economists, managers, and entrepreneurs, as well as account and finance auditors, software and telecommunication engineers, scholars of humanities, and the cities that perceive the central challenge of our times in the digital transformation.

The debate is launched as interdisciplinary and is theoretically followed, though, by the empirical research about the monetary creation and the digital entrepreneurialism, connecting the conceptual and model research to the sphere of the public policies and the technology transfer to private sectors, society, and entrepreneurs, within the scope of a strategic public policy of the *Secretaria Municipal de Direitos Humanos e Cidadania de São Paulo* (City Office of Human Rights and Citizenship of São Paulo), the “*Portal da Juventude*” (Youth Portal) (www.portaldajuventude.prefeitura.sp.gov.br), in partnership with the most important economic-financial information agency of the world, Bloomberg, and with one of the major global telecommunication-infrastructure company, Huawei.

The opening of this theoretical, empirical, and technological-development research field is translated, along the research, into the creation and impulse of an Innovation Laboratory for Finance and Entrepreneurialism (LIFE, in Portuguese), which will be networking (as co-laboratory) and benefiting from strategic academic partnerships with the University of Paris, University of Warwick, and the international network Games for Change (performing in the USA and Europe). Interdisciplinary and focusing on the finance innovation for entrepreneurialism of

creative industries, the research will be carried out through the collaboration of a net of professors, researchers, students, and citizens associated to the LIFE, within a network coordinated by the research group *City of Knowledge*.

The theoretical reflection, allied to planning and technological development and to the critical mediation of the results of this creation software and management of digital social coins, configures the creation of a new concept of liquidity for the citizenship, far beyond the very liquid modernity identified by Zygmunt Bauman (2000). The liquid post-modernity encourages the digital convergence between Bauman's liquidity and Keynes' pre-digital conceptual liquidity; such convergence is appointed by usually immiscible disciplines as economics and sociology.

As from Stiglitz (2001), it has become impertinent to respect the emergency of a new paradigm in the economic theory (as well as his methodologies of research, mensuration, technologies, and practical applications) focused on the information value. Some information economy that reveals, thus, a space-time relation common to the radical Keynesianism and to the theory of the nets: it is the formation of expectations with different temporal profiles; however, the digital nets widens the potential of imagining futures or even living them in the present time, in the flow of the nets, with their innovative strategies of connection, investment, accumulation, and creative destruction, stressing the institutional and Schumpeterian dimension of innovation and business within the economic but also symbolic and ideological dynamics (what Schumpeter called "view", and the very Keynes emphasized as the weight of dead economists' sacred memory over business and public men).

Furthermore, in a post-industrial economy in networks with microeconomic, behaviorist, and utopic perspectives, the Yochai Benkler's view emerged, which emphasizes within this new information economy in networks the same epistemological change indicated by Stiglitz, to the point of parodying Adam Smith by writing *The Wealth of Networks* (2006). In 2008, what appeared to be the beginning of a new era is tinted by the deceleration and worst crisis in the capitalist history since 1929.

Attentive to the relations between expectations, languages, and the Gold Pattern crisis, Keynes, almost a century ago, pointed to the economic dynamics characterized by the game of expectations, limitless language or an economy of which limits are given by the language, narrative, and expectational conventions (Schwartz, 2000).

The very linguistic disruption seems like a creative destruction process – the connection protocols, the new visibilities, and the emergency of a global "common" are promises that threaten from now the establishment accustomed to the intermediation rules previous to the dissemination of the digital net infrastructures.

The digital information economy turned the horizons of economics even more infinite as language and as business communicational platform, production model, and sharing. The value chains become more complex, and, at the same time, the identities, the memories and individual and collective projects gain a new effective and affective iconicity, through which opportunities of inclusion, innovation, and institutionalization (or visibility/hearing/scale) can be opened.

Also, the unbalances and threats have been widened up, the creation and destruction cycles seem shorter, without the future seeming to be promising out of the even more radical deepening of some technological trends that have been firmed since the Great War.

The issues of affective, political and constitutional order that surround the social creation of values were equally shaken up after the 2008 collapse: a sort of cycle as compared to the movement that in Seattle announced the end of the American dream some years before. The deepening of the global crisis is such that command words of more radical nature integrate, today, the mainstream within democratic societies: in the USA, the agenda is to deconstruct the banking system; in the United Kingdom, the Euro-related voluntary disconnection coincides with the growing protection of the social aid systems such as the citizenship income.

When welcoming these central issues of the present economic, political, and technological debate, we propose to deepen the debate either from the viewpoint of the history of the economic thought or the necessary approaches and some interdisciplinarity towards the humanities within all their ideological strands as well as an approach between the general theoretical perspective of the economy and the collective scientific agenda emergency that reaches all the engineering studies, architecture and urbanism, health and environment, law, economics, account and administration, urban and rural development, social and political psychology, among other areas concatenated by the common affection towards the digital revolution.

In the free-software economy, the value chain is something else. Reading Marcel Mauss is resumed; the exchange anthropological dimensions gain visibility; and the movements of the solidary, collaborative, and open innovation economy alter the sense, density, and sustainability of what we call “market”, now crossed by fluxes within information and audiovisual communication networks.

In this context of new icons and widened literacies, the monetary creation faces trends of disintermediation and dematerialization of the very notion of value, affected by the intangibility and fugacity of the net-formed values, the expectations accelerated by the information interfaces in real time, and by their rules of access, privacy, and transparency.

Within this technological, social, normative, environmental, and cultural space, in the last five years the digital platform emergency have stood out as economic realities that are beyond the classical dichotomies between market versus State, public versus private, individual versus collective, open versus closed, effective versus affective, existence versus essence (Kenney & Zysman 2015).

This viewpoint of the challenges for the economic theory in the beginning of the XXI century is summarized in the idea of a new theory of value as an icon – the ***Iconomy***.

Experimentally, the relations between economy, technology, and communications gain a noteworthy relevance when the object is the digital coins, especially the social or complementary coins.

In no object of the economy the dimensions of exchange, technology, and culture seem so reciprocally implicated. When it comes to emergency and diffusion of digital coins in the very field of culture (as in the “playable” game and fantasy universe coins), the phenomenon gains even more pertinence and seems to function as a source of inspiration and experimentation for new forms of ludic monetarization with so powerful affective and effective impacts as those already verified in the creation, use, and circulation of the more “conventional” money. As a rule, an imaginary coin can be the epicenter of a digital platform; anyway, it is just unthinkable to have a platform design that does not contemplate the economic and symbolic issues associated to the creation of coin, credit, and hearing/visibility.

The idea of social or complementary coins with a ‘creative’ bias has been object of reflection, prototyping, and debate along the years in research group’s projects: *City of Knowledge* (since 2003, at least, when the local monetary creation was experimented in a tourist polo of Brazilian northern state Rio Grande do Norte, integrating the actions of the project *Rede Pipa Sabe* (approximate translation: Pipa-Knows Net), and the financial support of FINEP (a public Funding Organ for Studies and Projects); of the ITI (Instituto Nacional de Tecnologia e Informação) (National Institute of Technology and Information); of Caixa Econômica Federal (a Federal Bank); and of the Provost for Culture and Extension of the University of São Paulo).

Since 2007, at least, this reflection has taken shape, has been articulated to extension projects, has gained visibility with the awards from the Ministry of Culture, BNDES, and UNESCO, which outstood the initiative as one of the “20 Ideas to Make the World Go Round” at the Rio+20 event.

As from 2014, it has become the theoretical research object of the Interdisciplinary Program for Graduate Studies of Humanities, Law, and Other Legitimacies at the Nucleus for Studies of the Diversities, Intolerances, and Conflicts of the Faculty of Humanities, University of São Paulo, in the Doctorate Project of Diego Viana.

Also in 2014, the theoretical and empirical theory about technological innovation oriented by the perception of an emergent **lconomy** was defined as the structuring thematic axle of the Project ‘World Innovations and Sustainability Helix’ (WISH) at the Nucleus for Research on Politics and Technological Management (PGT, in Portuguese), of the Faculty of Economics, Business Administration and Account of the University of São Paulo (FEAC), with the financing support of the USP Provost for Research.

VI – Literacies and the global emergence of creative currencies: the CLICKS strategy

The project can be simultaneously characterized as scientific research, technological development, and innovation (technological, social, and cultural). It conceptually means investigating the new borders of the creation of value, emphasizing the creative and cultural industries under the impact of the new audiovisual technologies of digital information and communications, engaging the university into a more socialized and open, collaborative and transparent creative process.

The maturity of the theme and of a new research international community culminated in the creation of the RAMICCCS, in 2015 - Research Association on Monetary Innovation and Community and Complementary Currency Systems (<http://ijccr.net/ramics/>), associated to the International Journal of Community Currency Research.

Finally, as from 2015, the research group, *City of Knowledge*, takes on the Trusteeship of the Portal of Youth at the City Office of Human Rights and Citizenship of São Paulo. This project will allow, in 2016, the experimentation with emitting and circulating social, complementary, and creative coins within initiatives of cultural production in the outskirts of São Paulo City, becoming, therefore, an exceptional opportunity for a practical evaluation of technologies, methodologies, and indicators of impacts associated to this research program.

The internationalization of this debate gained notoriety with the expansion of the bitcoins, but also with the dissemination of technological solutions that cause financial disintermediation, innovation in payment means, and active management models. Along the last five years, this agenda has been consistently validated and awarded in selective processes, such as, Santander Universities, Researcher Links (FAPESP (Research Support Foundation of the State of São Paulo) and the British Council), and the participation as Visiting Researcher at the Institute of Advanced Studies of the University of Warwick. In the very 2015, the partnership with the University of Paris was consolidated through the excellence laboratory LABEX in Cultural Industries and Artistic Creation (ICCA, in Portuguese), and the creation of a French-Brazilian Professorship at the University of São Paulo.

Either from the viewpoint of the theoretical review within the monetary and financial economy under the impact of the new digital technologies of information and communication, or as an opportunity for empirical modeling and experimentation, the conditions seem very propitious for an investment concentrated on research, international cooperation, empirical validation, and increase in the academic productivity boosted by the 'digital coins' and 'theory of value' themes in their interdisciplinary implications in the 'smart cities' and in the Internet of Things.

Such investment in a research-action program focused on intelligent, social, and creative coins has its importance both in the economy, finance, and business areas and it can reach compulsory spheres in view of the ubiquitous, immersive, and gamified digitalization, such as, human rights, privacy, behavioral finances, social and political psychology, urban digitalization models (smart cities), and in a wider manner promote the insertion of the very universities in the distributive conflict contemporary to the platform economies (including in the horizon of the education, knowledge, and culture markets).

Associated to the research group *City of Knowledge* at USP, the structure of a LIFE will be implemented by means of a viral diffusion of some software able to organize the emission and management of complementary coins with functions of inducing innovation and

entrepreneurialism in cultural industries. The biggest objective is to provide the monetary diversity experience in the digital culture.

As long as the practice community associated to the research, development, and implementation of creative coins should be consolidated along the project, its activities will be driven to a specific research group, already accredited by the Provost of USP – the **Iconomy**, by means of transferring the head office of the LIFE (as a spin-off of the *City of Knowledge*). The institutional and juridical design of this spin-off is a strategic target of the *City of Knowledge's* project Ludic Monetization.

The work of research, motivation, and the disclosing of results will be anchored on the installation of Bloomberg's information international agency terminals in the research groups involved, reaching several USP's units and partnerships at FEAC, ECA, IME, POLI, FFLCH, FAU, EACH, ESALQ, Faculty of Medical Sciences, Faculty of Law, and Innovation Agency.

- FEAC (Faculty of Economics, Business Administration, and Account);
- ECA (School of Communication and Arts);
- IME (Institute of Mathematics and Statistics);
- POLI (School of Engineering);
- FFLCH (Faculty of Humanities);
- FAU (Faculty of Architecture and Urbanism);
- EACH (School of Arts, Sciences, and Humanities);
- ESALQ (School of Agriculture "Luiz de Queirós)

In each unit the project will be backed up by a Professor, member of LIFE's Scientific Board, and who will perform as mentor of the pertinent bibliographic and technological review.

This *Ludic Monetization* project enables the construction, in the next years, of a basis for the development of a platform-economy-like incubator² as from USP Innovation Agency, encouraging spin-off projects through the ludic monetization of activities (courses, events, competitions, mobilization) promoted by the research group *City of Knowledge* and partners, focused on the creative economy and the cultural and artistic diversity.

In 2016, November 2-6, UNESCO will hold the first General Assembly of the Global Alliance for Partnerships in Media and Information Literacy – GAPMIL, at the School of Communication and Arts, Department of Film, Radio and TV, University of São Paulo. For the "City of Knowledge" research-program-action network, this may be an opportunity for the global design of digital structures which may be more creative and flexible to absorb the power, income and representation conflicts of contemporary networks, meshworks and markets.

VII - Conclusion

A new iconomy results from the accumulation of algorithms. What are its mechanisms to generate value, employment, income, capital, and expectations? What icons? What literacies and competences? What infra-structure determines and conditions the development of these platforms? What are its local, territorial, regional, and global effects?

What rights create and destroy? What limits are overcome or replaced from the viewpoint of the access to the material comfort and immaterial heritage sharing?

Who are its protagonists within the entrepreneurial, governmental, social, and political spheres?

What is the children's and youth's insertion as the dynamos of such digital icon economy? How are the new generations perceived? And what social, economic, and affective futures are in process of configuration?

What are the ruptures over the current order? What are the opportunities in view of the evident destructive chaos and the global widespread of the mass culture? How should university and research follow these transformations in the very mechanism of value representation?

Cultural diversity is indissociable from the monetary diversity. In a moment when the monetary, financial, and currency patterns are in global crisis, it is fundamental to carry out a conceptual, technological, and innovation socialization turning point to the extent that the academic nets, and the business, governmental, and civil society sectors come close together with the purpose of generating and rebuilding infrastructures, contents, fraternity and diversity.

It is not by chance, therefore, that the project presented above should define as an initial testbed the outskirts of São Paulo City, with the children and youth as protagonists, mapped out and mobilized by the *Youth Portal* and coordinated by the *City of Knowledge* together with the Municipal Secretary of Human Rights and Citizenship of São Paulo.

² Platform Economy means that tools and models are based on the power of the Internet. These digital-value creation platforms "will frame and channel our social and economic lives" (Kenney & Zysman 2015). "Platforms" are structures ("frameworks") that allow contributors (users, partners, suppliers) to perform a range of activities, often creating patterns *de facto*, building entire ecosystems for creating and capturing value (Kenney & Zysman 2015 e Gawer & Cusumano 2013). The platforms are associated to the "net effects", that is, its value is the function of hearing or the frequency in which they are accessed by users that generate complementary, collaborative, and affective innovations.

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