Sustaining Cultural Vitality in a Globalizing World:
The Balinese Example

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Abstract

It is generally accepted that massive tourism and a vibrant indigenous culture are mutually exclusive. Bali has so far proven to be an exception to this rule. This article explores a hitherto overlooked socio-economic mechanism behind that exception. It is a dual complementary currency system used for centuries by highly decentralized and democratic decision-making organizations. The reasons why such a dual currency system is so effective in mobilizing popular cultural creativity is investigated; and a systems framework proposed to determine the conditions under which this model could be applicable outside of Bali. This framework is then tested with a second case study: traditional shell currencies in Papua New Guinea. Finally, some potential applications in areas in the world other than traditional cultures are portrayed.

Key Words: Sustainability, Complementary Currency, Culture, Tradition, Bali, Integral Economy.

“Man doth not live by bread alone”
(Deuteronomy 8:3).

Defining the Problem

The process is well known, and has been observed all around the world: massive tourism and an authentic and living indigenous culture simply cannot coexist. Increasing numbers of tourists tend to ultimately destroy the exotic culture they came to experience in the first place, as the locals increasingly display their culture only for the tourists’ money. Many major tourist destinations have gone through this process: Italy and Greece during the 19th century when it became part of any gentlemen’s education to make “the tour” of the classical European civilizations (and from where the word “tourist” derives). Mexico, the Caribbean, Hawaii, Tahiti, Fiji and other Pacific Islands are well-known examples of the same process during the 20th century. Since the mid 1970s, many studies have reported a systematic conflict between two desirable aims: cultural integrity and economic development through tourism. Two specific conferences were the landmarks of these realizations in their respective fields. The systematic conflict between socio-cultural integrity and tourism was the main conclusion from the first conference of the American Anthropological Association devoted to “Tourism and Cultural Change” in 1974. The need for trade-offs between these two variables was the main conclusion of the joint UNESCO/IBRD “Seminar on the Social and Cultural Impacts of Tourism” held in Washington in 1976. (Smith, 1989; Picard, 1979). This built-in conflict can been summarized succinctly as “Tourism and paradise…are incompatible. For as fast as paradises seduce tourists,
tourists reduce paradises…Hardly has the last paradise been discovered than everyone converges on it so fast that it quickly becomes a paradise lost.” (Iyer, 1988).

Nevertheless, Bali seems to be an exception to this rule, where increasing numbers of tourists have not led to a corresponding increase in the rate of destruction of Balinese culture. But what is exactly meant by those terms?

**Some Definitions and Plan**

For the sake of clarity, by “culture” we refer here to the standard anthropological definition that goes back to E. B. Tylor: a complex whole which includes knowledge, beliefs, artistic expressions, morals, laws, customs and habits acquired by humans giving him or her an identity as a member of a specific society. For the case of the Balinese culture, the identity with which the majority of the inhabitants of Bali identify is simultaneously of an ethnic, linguistic, and particularly of a religious order. [1]

Finally, to verify whether a culture maintains its integrity or not, we will be using a relatively simple but empirically verifiable acid test: whether the cultural/religious performances are still held, and remain meaningful to the indigenous population, with or without tourists as spectators. In this respect we follow Noronha, as many others have done (Noronha, 1979; McTaggart, 1980; Greenwood, 1982, Macnaught, 1982; Goldberg, 1984; Graburn, 1984; Maurer & Zeigler, 1988).

This paper will describe one key but generally overlooked tool that is systematically used in Bali to achieve the unusual resilience of their socio-cultural fabric.

It is organized in nine sections with the following titles:

- The Balinese Example of Cultural Resiliency
- Some Partial Explanations?
- The Banjar
- The Overlooked Mechanism: a Dual Currency System
- How the Dual Currency System supports Cultural Resilience
- A Systems Framework
- Testing the Model with Shell Money in Papua New Guinea
- Applicability in Other Areas
- Conclusions

**The Balinese Example of Cultural Resiliency**

Almost everybody has heard of Bali as the “Last Paradise”, a reputation dating back to the time when Westerners first discovered it at the end of the 16th century [2]. In counterpoint, every generation during the 20th century has announced the imminent demise of the Balinese’ exceptionally rich traditional cultural heritage. The first figures published by the Bali Tourist Bureau reported 213 visitors during the year 1924, when the local population was estimated around one million. When in the 1930s the number of visitors reached for the first time thousand per year, travel brochures entitled “Bali: the Enchanted Isle” suggested to visit Bali soon
because “in another ten years, it may be spoiled by that insidious modernism.”(Picard, 1996) In the 1950s, after the Indonesian independence, the warnings would become more pressing: “This anachronistic relic of the Hindu soul is, after ten centuries, about to lose its exceptional traits. Let us hurry while there is still time, and contemplate it closely before it gives in to the contagion of modern Indonesia.”(Durtain, 1956). In 1971, the first official “Bali Tourism Development Plan” unperturbedly predicted that by the time its project would be completed in 1985 “the cultural manifestations will probably have disappeared, but Bali can still retain its romantic image as a green and sumptuous garden.”(SCETO, 1971). When in 1994, tourism traffic increased to over 2 million for the first time, the forewarning was repeated: “How much more tourism can the island take? …It is now clear that the unbelievably complex social and religious fabric of the Balinese is at last breaking down under the tourist onslaught.”(Dalton, 1990)

(Take in Figure 1) Today over 4 million tourists visit that small island of 3 million inhabitants, and are still overwhelmed by the vibrant pageantry of the thousands of religious festivals and other cultural events organized every year by the Balinese for the entertainment of the Balinese gods and themselves. Indeed, it still is true today that “at their temple feasts they combine two good purposes, namely to please their gods and amuse themselves. I would even say that these two things are identical with the Balinese.”(de Kleen, 1921). This is unlike other tourist destination sites - Hawaii, Tahiti or Fiji - where the indigenous culture has died out to the point where traditional dances for instance, are now organized exclusively for tourists. In contrast, out of the 5,000 dance groups listed with the provincial authorities as performing in Bali, less than 200 are maintained for tourist performances, and the other 4,800 for temple time (Picard, 1996).

It should be made clear from the outset that we are aware that:
- Bali or its culture has changed under the pressures of modernization and tourism;
- these millions of tourists have had negative effects on the environmental, social or cultural fabric in Bali;
- or that some enclaves of the Bali island, such as Kuta, belong culturally more to Miami Beach than to any tropical Asian island.

Several good publications are available that are making an inventory of such damaging impacts.[4]

But what we and many other observers claim is that “tourism has not destroyed Balinese culture” as it did in so many other places (Norohna, 1979; Macnaught, 1982; McTaggart, 1980; Cohen, 1988; Picard, 1996). Bali has been able to maintain a specifically Balinese social, cultural and religious environment against all odds, and many predictions to the contrary. In 1936, Margaret Mead in her first letter from Bali noted that “Bali seems to have learned through
a couple of thousand years of foreign influences just how to use and how to ignore those influences. Accustomed to an alien aristocracy, accustomed to successive waves of Hinduism, Buddhism, and so on, they let what is alien flow over their heads.” (Mead, 1977) Fifty years later, this point is still valid: “Beset by invaders for millenniums, the Balinese are responding to the latest incursions as they have to past incursions, by becoming more like themselves. The fabric of Balinese society is too strong and too flexible to be rent by easy money.” (Elegant, 1987) Another informed observer concluded that the difference is that in Bali: “The newly available consumer goods have not dethroned ceremonial expenses as a source of prestige and sign of status: the money earned from tourism feeds a competition for status that is expressed in the staging of ever more sumptuous and spectacular ceremonies – much to the delight of the tourists.” (Picard, 1996)

This article will explore the mechanism that has provided Bali with the cultural resiliency that has made it possible for it to achieve that result, and what sustainability lessons can be learned from it for other parts of the world.

**Some Partial Explanations?**

Some claim that that the Balinese exception is simply due to the fact that Balinese are somehow inherently and mysteriously different. “Bali will always be Bali. In the past, a hundred years ago, today, and even a hundred years from now…Tourism is for Bali, not Bali for tourism.”[5]

Others see the religion (mainly Hinduism), the complex caste system, racial characteristics, or the organization of the irrigation rice agricultural as the explanation of that difference.

Without denying that all these reasons may indeed play a role in the Bali exception, we feel that by themselves, none of them are really convincing because none of them - or even their combination - are really unique to Bali. After all, there are hundreds of millions of Hindus around the world where a similar caste system prevails; and they have not exhibited the same level of cultural resilience and creativity as the Balinese. Similarly, Bali shares with other parts of Asia its complex racial composition resulting over several millennia from successive invasions of Austronesian, Indic, Malay, Javanese and other ethnicities; as well as its irrigation and rice agriculture. Even the historical familiarity with foreign or colonial rulers, first noted by Mead, is clearly not unique to Bali.

Some anthropologists, particularly Clifford Geertz and Carol Warren (Geertz & Geertz, 1987; Warren, 1993), have identified a Balinese characteristic directly relevant for our question: its exceptionally intertwined local organization structures. The most important of those traditional structures, to which most Balinese still belong today, are three overlapping but separate local organization structures:

- the Banjar that orders the civil aspects of the community;
- the Subak that regulates the irrigation facilities (for farmers who are still active in rice production);
- and the Pemaksan that organizes the religious rituals.
Together, they form a tight and integrated structural fabric that strengthens the social and cultural fabric. This argument is convincing and valid. But is there not more to be learned from the Balinese example, besides tight-fitting organization structures?
To find out, the authors made during the Summer of 2002 a series of interviews - conducted mostly in Bahasa Indonesia - with local traditional Balinese leaders. The geographical focus was on the area of and around Ubud, generally considered as the “cultural capital” of Bali, because the interface between the indigenous culture and tourism is particularly intense in that region.

On the basis of this research, we propose that more than just structures may indeed be in play. We found that in addition an original social mobilization tool may explain the dynamism within those structures. Specifically, a dual currency system is systematically used, particularly in the Banjar organization. Both the Banjar structure and its dual currency system will be explained next.

**The Banjar**

The Banjar is the fundamental civil unit in Bali, operating in a decentralized, democratic, cooperative manner at the local level. It is an ancient organization structure, as the first written reference to it goes back to 914 AD (Agung & Purwita, 1983). It has also proven a very adaptable organization structure: “Even today, among families who have spent several generations in an urban setting away from the rice fields, the Banjar still plays an important role.” (Eiseman, 1990)

Rural Banjars are typically geographically bounded on one side by a major road, on two sides by secondary roads and on the end by a river, which irrigates the Banjar’s rice fields and forest which supplies respectively the main food staple and the raw materials for the many ceremonies held each year. In a small village, there is often only one Banjar; in larger towns, there may be several. In Ubud for instance, there are four Banjars in the town itself, and 9 additional ones in the immediately surrounding villages.

The Banjar structure having been amply described in the anthropological literature (Geertz, 1959; Geertz & Geertz, 1995; Guermonprez, 1990; Warren, 1993), we can be brief here. This paper will focus mainly on its socio-economic and cultural functions.

The Banjar head, the Klian Banjar, is elected by a majority vote of the members, but has always been and still is “more an agent than a ruler”. (Geertz, 1980). He receives no remuneration for this function. He can also be dismissed at a members’ meeting by majority vote. Each member is equal and has one vote, there is no special status granted to wealthier or higher caste members of the Banjar. Each thirty-five-day Balinese month on the average, the Kulkul bell (a wooden gong) summons the council members to the dedicated meeting place, the Bale Banjar, to decide on the next month’s activities. Special meetings can also be convened whenever necessary.

At such meetings, both new activities are proposed and on-going projects are reported on. At the same time, the contributions of time and money are decided upon for each project. However, if a majority of members becomes opposed to a particular project for whatever reason, it is revisited at the next monthly meeting to discuss whether or not to continue with it.

In the Ubud area each Banjar has between 750 and 1200 members, who are represented at the council by the 150 to 260 male heads of each household. The largest Banjars in Bali are the urban ones (Denpasar has councils with more than 500 family heads); in villages they can be as
small as 50 (Eiseman, 1990). Each has its own rule book Awig-awig, all based on the same
general principles, but with a lot of variations in the details.

In short, the Banjar functions as a community-based planning and implementation unit which
budgets always its activities using two currencies, both Time as well as Rupiah, which is
presented next in greater detail.

**An Overlooked Tool: a Dual Currency System**

In our meetings with the local Balinese leaders, we were repeatedly told that it is not something
special about the Balinese or Hindu religion itself, but the strong system of mutual cooperation,
the Banjar, which has maintained Balinese culture despite the large and increasing numbers of
tourists coming to the area.

Some quotes:
- “Banjar is stronger than religion in keeping community and culture together.” Pak
  Agung Putra, Klian Banjar Tengah
- “Banjar is what holds the community, each other, together.” Pak Ketut Suartana, Klian
  Banjar Sambahan.
- “Banjar is the most fundamental organization that keeps the Balinese character intact.”
  Pak Wayan Suwecha, Klian Banjar Kelod.

But what holds the Banjar together?

The intriguing answer is that a key element is a dual currency system, which gives the Banjar
structure an exceptionally flexible capability to mobilize local resources. The first of these two
currencies is the Rupiah, the conventional national Indonesian currency. The second one is “
Nayahan Banjar” roughly translatable as “work for the common good of the banjar”. It is a time
services currency, as the typical unit of account of Nayahan is a block of time of approximately
3 hours of work in the morning, afternoon or evening; and the *kulkul* gives a special summoning
for people to gather when collective work is called for.

On the average, each Banjar starts between seven and ten different projects every month, big and
small. And for each project, the expected contributions of each family unit – in Rupiah and in
time – are taken into account. In the poorer Banjars, the Rupiah constraint is typically the more
binding, while in the richer ones the opposite may happen.

In most cases, there is no problem finding enough people to contribute the time needed to
complete an activity, and thus contributions of Time are not recorded. In some Banjars,
however, where there is a scarcity in the contribution of Time or when there are complaints from
some members about the lack of contribution by others, the *Klian Banjar* records every
contribution of Time. Those who cannot contribute their share of Time are asked to send a
substitute person. In case either one is really impossible, then they must pay a charge of between
5,000 and 10,000 Rupiah (.50 to 1.00 US Dollar) for each time block missed. Such
substitutability is only partial and conditional, similar to the phenomenon studied by Foa
between money and love in Western culture: one can to some extent “buy love” with a nice gift
or dinner, or other expensive gestures, but when the relationship is entirely based on money it
becomes prostitution and ceases to be love. (Foa, 1971). [6]
The more organized Banjars in Ubud like Banjar Sambahan make the amount of Rupiah of such substitution cost a formal decision at the initiation of each project - when it is felt that everybody’s physical presence is deemed important the substitution cost is placed higher than for other projects where that is less the case.

Our interviewees are quite clear that: “Time is a form of money.” The majority even make the point that “Time is more important than Rupiah” for keeping the community cooperation strong in the Banjar.

The importance of these time exchanges within a banjar can also be expressed on the negative side: the main form of punishment meted out by the Banjar is not a Rupiah fine, but ostracism, the exclusion from the Banjar of someone who refuses three times in a row to respect the community decisions. “The Balinese still say today that to leave the *krama* (Banjar council) is to lie down and die.”(Geertz, 1980) And the reason given why such ostracism is so serious is “when they have an important family ceremony, like a cremation, marriages, or coming of age rituals, then nobody will give Time for helping them in the preparations.” In short, depriving someone of Time from the community is considered the ultimate retribution.

But why is such a dual currency system so important to keep community spirit and their collective cultural expressions strong?

**How a Dual Currency Supports Cultural Sustainability**

A more philosophically inclined Banjar leader, although obviously a Hindu, used a Taoist vocabulary of complementarity to describe the dual currency system as being in “Yin-Yang relationship”. One of these currencies - the normal Indonesian national currency – is in this view of a Yang nature, because it cannot be created within the community but has to be earned by competing in the outside world. The other - Time that everybody in principle has as the same birthright - is Yin because it is generated within the community, on an egalitarian basis, and generates cooperation. It is also something that you can’t accumulate and store like conventional money: use it or lose it.

Western languages do not have words describing the Yin-Yang concept, so we will have to use the Oriental word for it. Taoism conceived all forces in complementary pairs like earth-heaven, water-fire, inhaling-exhaling, pulling-pushing, feminine-masculine, etc. Although obviously distinct forces, they are really seen as parts of a single ultimate unity, and therefore necessary to each other. A bit like a magnet necessarily must have a positive and a negative pole – either one separately can’t exist. In the specific money and societal context of this paper, the Yin-Yang notion refers to the polarities of cooperation-competition, egalitarian-hierarchical, mutual trust – central authority, feminine-masculine, etc. Figure 2 provides a summary of some of these complementary aspects. It includes some of the philosophical aspects that are underlying this worldview, because they are coherent with other important aspects of the Balinese culture. For instance, to a Balinese, the Divine is not only transcendent but also immanent - present everywhere in everything - not just in the temple compound or invisible in the heavens.
This figure can be read from up to down to focus on the internal coherence of each philosophical framework; or horizontally to see the polarity between the different worldviews. What is important to realize is that from a Balinese perspective both views are equally valid, and they have spontaneously developed a dual currency system that supports both worldviews. This figure also highlights the differences with our Modern Western culture, where it has long been considered self-evident to have a monopoly of a Yang currency and a predominant focus on the Yang coherence.

An interesting difference in attitude can also be observed towards the two currencies: specifically a very flexible Yin attitude prevails towards the Yin currency. If, for example, someone has a sick child that interferes with providing time, nobody will object to him or her not contributing an equal share in time commitments. What matters is the goodwill underlying one’s actions.

One can see why such a dual currency system within a democratic structure like the Banjar provides a lot more flexibility than when one has to operate within only one currency system as is the case in most other parts of the world, including the “developed” ones. People who have a lot of conventional money tend to have little time, and people with little money tend to have more time. So the dual currency mechanism enables some automatic leveling among the social classes.

Furthermore, this dual currency system provides more flexibility in the choice of projects that get approved by the council. In poorer communities projects that require a lot of time are favored by the Banjar; and in rich ones the more expensive Rupiah projects tend to pass. For example, we found one single project in a rich Banjar that had a Rupiah budget of 1.2 Billion (equivalent to about 120,000 US$). But even the poorest Banjar we interviewed has a large group performing at their temple a great kecak dance, which requires a lot of manpower but no expensive garments or props. In short, in both cases, a lot of local resources can get mobilized to meet whatever the community chooses to focus on. And in all cases, a mixture of Rupiah money and Time money are always involved, just the proportional mix tends to vary. This explains why, in Bali, large-scale religious or cultural events involve practically everybody, and are not limited to elitist social groups as tends to be the case elsewhere. This dual currency system may therefore be the real secret for the cultural resilience of Balinese society.

Note that this system goes also beyond religious or cultural events. We found Banjars who support their primary schools or even build their own roads when the central government isn’t responsive to their demands. Here too, there are limitations to the substitutability of the two
currencies: the cement or other materials needed for such works remains obviously part of the Rupiah budgets.

To be able to identify whether anything of the above Balinese case study is relevant for application in an environment other than Bali, we need to identify the general mechanism of how dual currency systems supports a stronger social and cultural fabric. This is why a systems framework for the above process will be presented next.

**A Systems Framework**

The first step is to classify the four well-known forms of capital:

- Physical capital such as plant, equipment, real-estate;
- Financial capital such as cash, stocks, bonds, and “intellectual property” such as patents and trademarks;
- Social capital such as family or group solidarity, peace, community, quality of life, etc.;
- and finally, Natural capital such as clean water or air, biodiversity, and other “gifts of Mother Nature”.

These four main forms of capital fall into a straightforward pattern within the Yin-Yang framework as show in the following matrix.

<table>
<thead>
<tr>
<th>Non-material Level</th>
<th>Yang</th>
<th>Yin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial capital</td>
<td>Physical capital</td>
<td>Social capital</td>
</tr>
<tr>
<td>Material Level</td>
<td>Natural capital</td>
<td></td>
</tr>
</tbody>
</table>

The next step is to bring into evidence the linkages between the dual currency system and these four forms of capital. As noticed earlier, conventional national currencies have Yang characteristics: they are centralizing in nature as they are created through a highly centralized and hierarchical process, they foster competition, and they bear interest (a mechanism that encourages accumulation of money and its concentration). Yin currencies, such as the Balinese Time currency, exhibit exactly the polar characteristics: they are created through an un-centralized and democratic process, they foster cooperation, they are interest-free and aren’t accumulated. Figure 3 illustrates the dynamics of the two complementary currencies in their respective economies.
The conventional national currency operates within the competitive economy where it facilitates quite efficiently the various types of commercial transactions, and it creates financial capital in the process. We could call this process the Yang Cycle. The Yin currency in contrast activates the Yin Cycle in a cooperative economy, facilitating community exchanges that help generate Social Capital. Both economies require as underpinning a foundation of Physical and Natural Capital.

Conventional economic theory formally acknowledges the existence of only the two Yang forms of capital: physical capital and financial capital. Unsurprisingly, they are measured and exchanged in the national currency, i.e. the Yang currency. Conventional theory therefore tends to ignore the role of the two forms of Yin capital - natural capital and social capital - and considers them as “externalities”.

Nevertheless, all economies need to have both a Yin and a Yang cycle – otherwise important Yin functions such as children education, elderly care, community or volunteer activities would not exist. But the Yin functions tend to end up less acknowledged and honored, and starved of resources in an economic structure where a monopoly of a Yang currency prevails.

One result: community decay, and less solidarity and group creative activities than is the case in societies with a complementary currency system. Another result: it is often said that in Bali “everybody is an artist of some kind”, as indeed almost everybody tends to contribute to group cultural events as musician, dancer, mask maker, decorator of musical instruments or temple ornaments, or at the very least arranger of the elaborate daily offerings. In contrast, in the “developed societies” where exchanges are monetized exclusively via a Yang currency, the arts tend to become a highly specialized and comparatively rarefied function, and their output becomes a commodity whose consumers are by and large restricted to educated elites.
The Integral Economy framework formally recognizes both a Yin and a Yang cycle, where each cycle mutually supports and complements the other. Within such a framework, the Balinese exception and many of its unusual characteristics become more easily understandable, even predictable. This model also enables us to explore with more rigor under what circumstances the Balinese example may be valid outside of Bali, which is the topic addressed next.

**Testing the Model with Shell Money in Papua New Guinea**

Community associations that bring people together to plan, budget and implement projects in a fully democratic and participatory way are certainly not original to Bali. What is more rare, however, is the use by such grass-root structures of a Yin complementary currency operating in parallel to the normal cash economy. We believe that it is the marriage of these two concepts, the highly decentralized democratic structure of the Banjar and its use of a dual complementary currency that has enabled and continues to enable the Balinese culture to withstand the external pressures that otherwise might have overwhelmed its rich cultural heritage.

While the combination of a decentralized democratic organization structure and the use of Yin currency is rare, it is fortunately not totally unique to Bali. Recently, a detailed case study became available in Papua New Guinea that enables us to test the proposed model. The first study on the contemporary uses of the traditional shell money has just been completed for the Provincial Government of East New Britain. (DeMeulenaere, Week & Stevenson, 2002) Shell money is a currency that has been used for centuries by the Tolai people. It traditionally facilitates the local exchange in basic goods and services as well as fulfilling customary functions: e.g. payment of bride price, or as compensation for wrongs committed within the community. It is also formally re-distributed to all attendants during the funeral ceremonies. This shell money is of a Yin type because - as is the case of Bali’s time currency - it is created within the community; through democratic and autonomous local structures; to be used in community-initiated economic and traditional activities; it is interest-free; and it circulates in complement to the national currency.

This second case study confirms all the findings of the proposed model. Notwithstanding the obvious differences in culture or religion (the Tolai religion is predominantly Christian, on top of an earlier animist tradition, while Bali is predominantly Hindu); the dissimilarity in the physical nature of the two Yin currencies; and the variation in the kind of external threat to the traditional culture - exactly the same results can be observed in both places. Indeed, the evidence from the field in both islands shows that the use of their respective complementary currency fosters cultural vitality, economic resilience, and social cooperation, notwithstanding all the differences between the circumstances of both places.

The threat to the local culture has indeed taken very different forms in Bali and Papua New Guinea. In Bali, it took the form of the massive tourist influx built up over many decades, as described at the beginning of this paper. In Papua New Guinea, it is due to the recent wave of globalization, which by its very definition opened up the local economy, with the undesirable “externality” of threatening to dissolve the pre-existing social and cultural fabric. But in Papua New Guinea as in Bali, the evidence from the field shows that use of the local complementary currency has contributed to a more resilient traditional culture than has been the case in the western side of the island and other parts of the country that do not have a dual currency system.
The recent interest of the Provincial Government in formalizing the use of shell money has two objectives: sustain the traditional culture and counteract the recent deterioration of the national economy. Therefore in the case of Papua New Guinea, the use of shell money has proven culturally and socially helpful in the past during the good times; but it has become even more critically useful during the current economic deterioration.

There must be other cases around the world of traditional communities using dual currency systems. But as far as we know, they are still part of what historian Arnold Toynbee labeled the *Terra Incognita* of the so-called primitive currency systems. It is also noteworthy that several ancient civilizations with a worldview compatible with the value system presented in Figure 2 correspondingly developed dual currency systems with as beneficial results as the ones described in this paper (Lietaer, 2000). But such historical precedents cannot be tested in the field today. It would therefore be of great interest to be able to further test the proposed model with additional and fresh evidence.

### Applicability in Other Areas

If it is true that a dual Yin-Yang currency approach combined with a democratic grass root organizations can significantly contribute in strengthening the local economy and the cultural and social fabric - particularly whenever external forces are threatening them - it may very well become useful in many parts of the world. By making use of a Yin complementary currency Yin-type activities are more continually nurtured whether they are of a social, cultural or artistic nature; even while the people pursue in parallel market-oriented activities. In traditional cultures it could help avoid the degradation that normally occurs once the customary culture is abandoned, or worse, sold off for tourist consumption in the pursuit of these commercial activities. But it could also be relevant for repairing the often very damaged communities of the developed countries.

It is intriguing that there are many places in the world where either one of these concepts separately are currently operational – either decentralized democratic organizations, or complementary currencies. It is only their combination that remains comparatively rare.

On the complementary currency side, there are many community exchange systems functioning throughout the Third World; and more surprisingly in the last decade we have seen similar non-conventional currencies develop exponentially throughout the First World. There were less than a hundred such modern systems operational in the world in 1990, today there are well over 4,000 (Lietaer, 2001). For instance, Local Exchange Trading Systems (LETS), Time Dollars and Time Banks all use different forms of Yin complementary currencies. In Japan, regional and local governments have been supporting pilot projects throughout the country to facilitate the rebuilding of community and local social capital, the caring of one for another. Several of these new exchange systems even make use of smart cards to process the Yin-type complementary currency.

Complementary currencies may indeed be a very old idea whose time has come for First World countries as well. The Prime Minister of the UK, Tony Blair, pointed out in a speech during the year 2000: “As a nation we’re rich in many things, but perhaps our greatest wealth lies in the talent, the character and the idealism of the millions of people who make their communities work. Everyone – however rich or poor – has time to give … Let us give generously, in the two currencies of time and money.”
Could we not learn something from the people who have accumulated centuries of experience using such tools? The Bali and Papua New Guinea case studies reveal that this approach will work best when implemented by local non-governmental organizations whose membership truly and democratically participates in the selection of the projects for which their time and money would be used. Otherwise, the legitimacy of the projects would quickly be questioned. The resilience of the Balinese approach derives clearly from genuine grass-root support for every activity that the community itself has decided upon, and the possibility to stop any project whenever a majority in the community starts questioning it. When this approach is abused through a top-down imposition of projects that the participants have not freely chosen (as was the case when the Indonesian government required Time participation in some projects in Java and other areas), the mechanism quickly deteriorates and breaks down.

We obviously do not claim that dual currency systems are a panacea to solve all problems, social, cultural or otherwise. But lessons from the traditional past could become useful to the future of this globalizing world. This has been picked up by contemporary economists (Rosser & Rosser, 1999) to be called the “New Traditional Economy”, which maintains culture and society while allowing people the freedom to pursue market-oriented activities.

**Conclusions**

Most existing economic theory has as hidden hypothesis that all exchanges need to be facilitated through a monopoly of a centrally controlled currency. Furthermore, conventional economic theory assumes that all currencies are implicitly value-neutral: they are supposed not to affect the transactions or the relationships among the people using it. As the English put it: “A fact is a fact, and is more respectable than the Lord Mayor of London.” And the Balinese exception provides enough facts – historical and contemporary - that should force us to put a big question mark behind both those implicit assumptions of conventional economic theory.

It is a fact that many transactions and additional activities occur in Bali and in Papua New Guinea thanks to the existence of their respective complementary currencies circulating at the local level, and functioning in parallel with the national currency. It is also a fact that such complementary currencies facilitate a stronger involvement of even the poorest communities in the cultural activities of both islands than would be the case without them. Finally, both the Balinese and the Tolai themselves claim that they play a key role in creating the proverbially “strong community fabric” evidenced in their respective societies.

Nobody is saying that community currencies all by themselves are a magic bullet for Third World poverty and cultural degradation. A complex web of interrelated but independent, decentralized but united structures holds the Balinese or the Tolai societies together. But at the core of this network live the Banjars in Bali, and the family networks of Papua New Guinea. And at the core of those decentralized organization structures operate in both cases their respective dual currency systems.

In a large-scale survey of the American public, no less than 83% considered that the top priority in the US should be to “rebuild community”(Ray & Anderson, 1999). This suggests that the automatic assumption that the dollar is the only monetary tool relevant to solve all problems - especially those of a community nature - may usefully be questioned, even in the US.
Finally, one of the most frequent complaints about globalization has been that it entails an erosion of cultural specificities around the world. A dual currency approach could be of interest to those who want to rebuild a sustainable social fabric or strengthen their cultural diversities in any country, independently of its degree of economic development.
References


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Notes

[1]. It should be noted that there are no terms in the Balinese language to describe concepts like “culture” or “art”. The Balinese terms always refer to a specific activity that is inseparable from its context. For instance, there are no words to distinguish a “dance”, from “dancer”, or “theatrical performance”. The Balinese word refers to so-and-so dance (Pendet, Rejang, Baris Gede, Topeng, etc.) by which is meant at the same time the music, theater, and specific ritual in which the dancer performs, all of which can virtually not be separated. This is in sharp contrast with the Bahasa Indonesia, the official language of Modern Indonesia, where just like in Western languages, abstract notions such as “art” (seni), “culture” (budaya), “dance” (seni tari) or “theatre” (seni drama) are quite distinct and familiar. (Picard, 1996, pg 135).

[2]. The Westerner who first discovered Bali was the Dutchman Cornelius Houtman, in 1597. After a long sojourn on the island, several of his crewmembers decided to stay, establishing the reputation back in Holland that a new “paradise” had been found. “The Last Paradise” became the title of the first book in English on Bali, published in 1930 by the American journalist Hickman Powell. (Covarrubias, 1937)

[3]. The source of the data for Figure 1 is the Directorate General of Tourism and Bali Government Tourism Office. Disconcertingly, there are no exact statistics of the number of tourists visiting Bali, the only hard number being total foreigners arriving directly by international flights at the Bali Airport. These rose from 23,000 in 1970 to 1,468,000 in 2000. 95% of those direct arrivals report that they come for vacations, and 30% are on a repeat visit. However, this doesn’t capture foreign or Indonesian tourists arriving via Jakarta or other internal Indonesian flights, the ferry arrivals or even the cruise ships mooring at Benoa or Padang. The estimates of total tourism arrivals range therefore between 2.5 and 4 million for 1994; and between 4 and 5 million for 2000. The lower numbers being the official Tourism Office estimate, they are the ones used in our graph.

[4]. See for example for recent opinions by Balinese themselves: (Ramseyer, 2000); or by foreigner observers (Vickers, 1989). The Kuta “environmental-type” tourism attracts the tourists who come for surfing, sunbathing, girl watching, and related beach-type activities. This area functions practically completely outside of the Balinese cultural environment. There seems to be some historical predestination in this development, as this part of the island has always been considered as “outside” of the Balinese mainstream by the Balinese themselves. First, to the Balinese, the seashore is by definition considered Kelod meaning the area of the devils, bad spirits and decay. Furthermore, Kuta specifically was the slave harbor in the 17th and 18th century, and the area where criminals, people excluded from their banjars, and foreign traders would hang out. Geertz describes colorfully the life of Mads Lange, a Danish-born adventurer and trader, who became the de facto harbor- and trade-master of Kuta during the 19th century. (Geertz, 1980, pgs 80-94). All of this long before the first tourist set foot on Kuta beach.


[6]. Foa’s “Resource theory” (Foa, 1971; Foa & Foa, 1974) classifies resources in different categories and explains why some types of resources - such as love and money - are not easily acceptable as substitutes. In contrast, love and services, or money and goods are more proximate in this framework and therefore more substitutable. Further research has empirically confirmed this model (Brinberg & Castell, 1982; Brinberg & Wood, 1983). Our findings with the dual currency model are consistent with this approach, as the Balinese Yin currency of time is in fact
a close substitute for services. The findings on the role of dual currencies in both Bali and Papua New Guinea are furthermore consistent with the concept of the existence in stable societies of a “ceremonial fund” which has a collective social function beyond the strictly economic one (Roberts & Dant, 1991). The congruence of the Yin-Yang complementary currency framework with empirical findings from current social sciences and psychology is the topic of a future paper.