

Social Capital and Reciprocal Exchange: Investigating Totonac Traditions in the Sierra Norte de Puebla

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The aim was to explore social capital in the Totonac ethnic group with the idea of identifying its sources and proposing how social capital is perceived and understood from a different centre of knowledge than the Western one. Methodologically, the study was based on a qualitative approach using the following research techniques: semi-structured interview and ethnographic work from a participant observation perspective. The results allowed us to observe, at least in the Totonac culture, changes in the way of understanding and practicing some relationships, including reciprocity, which in the study were approached from two analytical axes, namely, from the interpersonal relationships of the Totonacs and from the relationships with nature. We can conclude that from the Totonac culture, the perception and operation of social capital responds to a different logic. We can confirm this from the experiences narrated by the Totonac group of the Sierra Norte de Puebla, who from their cosmovision possess a social dynamic where reciprocity unfolds in their different social practices and acquires meaning from their roots, nuanced through their own cultural expressions and manifestations. Finally, a research agenda is proposed to explore social capital in the rest of the native cultures.

Keywords: Social Capital; Totonac; Sierra Norte De Puebla; Original Peoples; Indigenous

INTRODUCTION

Social capital is a widely used concept in Western scientific literature (Woolcock 1998; Durston 1999; Woolcock and Narayan 2000; Ostrom and Ahn 2003; Kanazawa and Savage 2009; do Carmo 2010) associated with a variety of issues such as democracy, political participation and civic culture. Other studies have addressed its importance from the perspective of rural development, rural territories and their social actors (Narayan and Pritchett 1997; Lyon 2000; Lugo-Morin 2013). This analysis starts from Lugo-Morin's (2013) definition of social capital as social networks that are located at different levels of analysis, whose emergence and permanence requires an institutional framework (formal or informal) that in turn generates different organizational expressions. But when

considering other centres of knowledge, such as that represented in the culture of the Totonac ethnic group, the sources of social capital can be nuanced.

The modern vision of social capital in the context of Western culture is based on the current economic system, whose characteristics are based on three elements previously mentioned by Lugo-Morin (2013): networks, institutions and organization. These elements endow individuals, collectives or territories with possibilities of development at different levels. In native cultures, the conception of social capital probably changes because the survival of these cultures depends more on their capacities than on their interests associated with an economic system, a visible example is the support given between individuals of the same social group, also called reciprocity, here it is important to highlight that reciprocity is a form of social capital both in Western culture and in native cultures and as this form of social capital co-exists in several cultures, probably other forms of social capital are unveiled, this approach supports the objective of this study.

Some authors on the Western side argue that social capital is a double sword, referring to the fact that social capital has a dark side, characterized by individualities that possess authoritarian traits and operate for their individual benefit, and not for a collective (Portes and Landholt 1996). The development of this analysis will allow us to explore whether there are dark intentions within the social capital of indigenous cultures.

The idea of social capital is that a person's family and friends constitute an important asset that emerges in situations of crisis, to usufruct or simply to benefit economically (Lugo- Morin 2013). But as Portes and Landholt (1996) argue, the benefits of social capital are often obtained in a negative way, so it is possible that nowadays, due to modernity, we are talking about a dual social capital, i.e., good or bad. According to Portes and Landholt (1996) the dark side of social capital is determined by context, but these authors inadvertently do not consider culture. For Putnam (2000) these negative manifestations of social capital take two forms, reciprocal relations and conflict relations, both of which are associated with inclusive or exclusive social capital. In this logic, van Deth and Zmerli (2010) and Rohman (2014) argue that when the mechanisms of integration of local collectives fail, either because of weak institutional structures or network failures, negative aspects of social capital appear. Based on the above, this study takes into consideration the notion of negative social capital in order to identify those elements that deteriorate interpersonal relations among the selected cases. Briefly, this refers to cases where social capital presupposes limitations for certain groups or individuals to access resources; where it excludes certain population groups; and/or where it limits the individual or collective freedom of some for the benefit of others.

In this logic, this aims to explore social capital in the Totonac ethnic group with the idea of identifying its sources and proposing how social capital is

perceived and understood from a centre of knowledge other than the Western one. In order to achieve the previous objective, a case study was analyzed that identifies economic, social and environmental relationship in different localities of the municipality of Huehuetla that tend to build individual and collective well-being. Huehuetla is located in the eastern part of the Sierra Norte de Puebla in Mexico. The complexity of the region is related to the economic-political dynamics and inter-ethnic characteristics. The upper zone is characterized by a greater loss of use of the mother tongue, perhaps due to greater interaction with the non-indigenous population; there is a “transition” zone, where there are various means of communication, the presence of chiefdoms and a process of reconstitution of indigenous culture; finally, in the middle zone, coffee cultivation predominates and there is an important organizational movement that partly explains the processes of recognition (Maldonado and Terven 2008). Historically, in the region under study there have been distinguished mestizo territorial spaces with a strong influence of western culture due to the forced withdrawal of the original peoples to these areas. As a way of safeguarding their integrity, the Totonac people took refuge in these spaces since pre-Hispanic times, and this was accentuated during the Spanish conquest. This allowed that, in spite of syncretism, the native peoples of the Sierra Norte de Puebla still preserve an important part of their cultural and ideological traits.

The Spanish conquest had an important influence on Totonac culture, giving rise to religious syncretism, but the Totonacs also preserved important developments in the context of their culture, such as the vigesimal numerical system (Santiago Francisco and Saavedra 2016). The social logic of the Totonac ethnic group is relational and has allowed for the deployment of differentiated social practices, something natural in native cultures. For example, the idea is shared that pointing the finger at vegetables in an early physiological stage (unripe), such as squash or vegetable pear also called mirliton, causes them to detach and rot. Similarly, the number seven is associated with death, unlike in Western culture, whose cabalistic number is thirteen.

This municipality has a majority presence of indigenous people from the Totonac group. According to Beaucage (2012), the Totonac family nucleus is made up of an average of 5 members, who support themselves economically through small-scale agriculture. According to Ellison (2017), their agricultural practices and their interactions with the natural environment are governed by their belief system, values and traditions. The territory seen from the Totonac vision constitutes a sacred space guarded by gods and owners (entities or deities) whose interaction is established through the giving of offering and ritual practices that regulate reciprocal relationships.

In this way, the Totonac ethnic group has articulated a food system derived from a productive space of variable size that does not exceed one hectare. This space is considered sacred by the ethnic group, governed by its system of beliefs,

values and traditions, made up of an association of crops where coffee, some fruit trees (e.g., orange, lime, banana, passion fruit), medicinal plants, edible plants and timber trees for the transformation of biomass through the collection of firewood to obtain energy for domestic use can be identified. At the same time, the Totonac have other spaces available for planting maize as a complementary food strategy and to obtain economic income through its commercialization.

The Totonac cultural context in the municipality of Huehuetla sustains their agricultural practices and harvesting of their crops, in the cases observed the blessing of seeds in the Catholic church before sowing them, offering on their altars to ask for good harvests and the worship of their deities such as the Lord of the Mountain or Mother Earth as part of a logic that promotes the individual and collective wellbeing of the indigenous group. In the realm of social capital, this is perceived as a relational expression of the tangible and the intangible, constituting a source that gives continuity to their belief system, values and traditions, guaranteeing the social reproduction of the Totonac. This system of beliefs, values and traditions is of historical heritage and is tinged by external religious elements. According to Báez-Jorge (2013), Mesoamerican religion coexists with Catholicism as a product of this synergy, and in the face of this reality new forms of popular worship have emerged that developed in a dialectical relationship with religion and hegemonic culture. Although the ritual and ideological backgrounds of religiosity may be contrary to ecclesiastical provisions.

MATERIALS AND METHODS

Research Design and Instrument

Methodologically, the study is qualitative (Creswell and Poth 2018). Specifically, it is a collective case study (Stake 2005) since it sought to identify the forms of social capital and their manifestations in the context where they occur (Yin 1989). For the collection of information, semi-structured interviews and participant observation (Ethnographic work) were used. This was done as a strategy of triangulation and validation of the study (Patton 1999). This made it possible to obtain a holistic understanding of the phenomenon under investigation.

For the application of the interviews, a guide of questions was elaborated (Boyce and Neale 2006; Martínez 1998). In line with the objectives of the study, this guide explores specific aspects such as the conceptualization, forms of manifestation and characteristics of social capital; the legitimization of social capital through informal institutions; the role of social capital in the resolution of problems and the relationship between social capital and political dynamics in the communities under study.

The ethnographic work was carried out from the perspective of participant observation, obtaining information on ritual practices and their association with

productive spaces. It was possible to go deeper into the indigenous group's perception of social capital, obtaining linguistic information and its possible similarity to the concepts of the forms of social capital that are handled daily from a Western perspective.

Sample Size

Both observations and interviews were carried out in four localities located in the Sierra Norte de Puebla. Namely, Chilocoyo del Carmen, Atlequizayan, Tepetitlan-Jonotla and Lipuntahuaca. The selection of these is due to the fact that each of them represents strategic points in the region. Additionally, the selection is due to the receptive disposition of the community (Rodríguez Gómez et al. 1996) and what Stake (2005) calls "uniqueness". That is, the fact that the cases allow for the analysis of social capital in little explored socio-cultural spaces.

Analysis Process

The fieldwork was conducted in two temporal moments, a first moment that used the technique: participant observation, carried out in the month of July 2015 and a second moment, in which semi-structured interviews were applied in the months of September and October 2018, the interviews were coded holistically (Saldan˜a 2012) for subsequent categorization and analysis (Neale 2016) in order to identify salient elements on the sources of social capital. With reference to the participant observation, the holistic perception of the technique allowed us to learn about cultural aspects of the indigenous group associated with the forms of social capital and its sources. In the case of the analysis of the sources, a native specialist of the indigenous group had to be consulted, through whom the linguistic meanings of the whole diversity of the forms of reciprocity practiced by the Totonac indigenous group as well as their grammatical structure could be known.

RESULTS

The results obtained are based on two levels of analysis. On the one hand, social phenomena that shed light on the sources of social capital among the Totonacs, and on the other hand, first-hand linguistic information that shows us in a practical way the conceptions of social capital from the culture itself.

The ethnographic work and the interviews conducted made it possible to identify more than 5 factors that affect the presence of social capital. In addition, during the interviews, the informants repeatedly pointed out aspects that have a negative impact on social cohesion. Thus, as this was a recurring theme, the information was systematized following the aforementioned procedure. As a result, a list of 5 factors which weaken social capital was obtained.

During the visit to the community of Chilocoyo del Carmen, it was found that this community was separated from a neighboring community Chilocoyo de

Guadalupe, due to the interests between the elites of each place, the interests are dynamic and the kinship relations and in the social and cultural spheres, the links are necessary to settle the possibilities of conflict, as these can often become violent, which can erode trust. It was therefore noted that the presence of political parties, whose structure is alien to kinship relations, weakens the network of ties because of the interests involved.

The results of the analysis of the interviews in Chilocoyo del Carmen showed that the lack of political commitment often leads to promises that are not kept, for example, those related to ecological preservation. This point is fundamental, as most of the interviews mentioned the importance of fulfilling offerings and rituals associated with the preservation of the ecological balance, as well as individual and collective commitments to spiritual entities related to traditional crops and the forest.

In the interviews, we also learned of some groups that aim to strengthen economic development while taking environmental care into account. However, the lack of comprehensive cooperation, both on the part of the people and the political elite, means that this is not achieved. The support that is usually given consists of plants, and fertilisers that are often not suitable for the soil of the area, so the aid becomes superficial.

In the case of Tepetitlan and Jonotla, both are small communities with no more than 200 inhabitants, and it was observed that social capital presents similar variables to the community described above, where the social, cultural, and ecological dimensions are fundamental. Politics, which is apparently the stronghold of some families who have managed to consolidate themselves, and who in order to remain at the top of the local power have had to generate trust among the community through the delivery of support, but unlike the previous ones, there is a civil association made up of 47 people, called "Tosepantomín" and its mission is to obtain support for the cultivation of crops for the countryside without the intervention of the political elite. It is important to mention that political consolidation is not possible without the use and strength of kinship relations or neighborhood relations of belonging and social cohesion around the notion of belonging to the community. A clear example of this is the relevance of traditional dances, being institutions of religious, spiritual, social and in relation to the maintenance of ecological balance in many cases, and which help to consolidate relationship between people through socialization and belonging. In this sense we find many examples of dances (e.g., dance of tejoneros, dance of voladores, dance of quetzales), many of them linked to ritual cycles, which in turn are directly related to agricultural cycles and at the same time depend on and interrelate with religious cycles.

In Lipuntahuaca, social capital is built through social interaction, which has managed to combine individual aspirations with collective aspirations; therefore, cooperation has made problems become of collective interest for everyone, for

example, a sick neighbor or the lack of electricity, or cooperating to organize an important festival. All of this allows the notions of belonging to the locality to be consolidated in this community, resolving many possibilities of conflict. In this place, it could be seen in a similar way that the political networks are led by some family group; however, the trust of the community is often broken when food and support are given in a biased and discretionary manner based on kinship relations; this leads to mistrust and hence to the emergence of social problems. Support between people also serves to address common and not so recurrent problems, and these actions allow for social cohesion triggered by reciprocity.

In Atlequizayan, kinship has been consolidated through marriage, as it is the element of organization around the community that allows for the widening of relations between the inhabitants, which is part of the social capital. Politics there also lies in the hands of a few local families. Social capital was found to be present in the economic, social and political spheres. There is no grouping as such, but when there are problems in the countryside people organize themselves and once the dilemma is resolved, friendship described above fail to establish strong ties that have an impact on the maintenance of positive social capital. In the locality, there is a predominance of friendship relations motivated by belief and religion. Festivals and celebrations are closely related to agricultural cycles as well as to ecological maintenance and good relations with spiritual entities associated with nature.

Table 1. Factors affecting social capital in the study communities.

Incident Factors	Communities ¹			
	1	2	3	4
Patron saint festivals of the Catholic religion and construction of altars on the day of the faithful (sharing of food)	X	X	X	X
Cronyism, kinship networks across marriage links	X	X	X	X
Christmas parties and festivities during the year (sharing food)	-	X	X	-
Collective aid and altruistic financial cooperation in the event of the death to one member inside the community and mutual support	X	X	X	-
Moral presence of the Priest and practice of customary to get justice and peace	X	X	X	X
Catechism and workshops to children by institutions/organizations non-government	X	X	X	X

¹ 1 = Chilocoyo del Carmen, 2 = Tepetitlan-Jonotla, 3 = Lipuntahuaca, 4 = Atlequizayan.

In this context, we notice that social cohesion is strengthened. Kinship is present when there are problems, and in particular it becomes a common ground for finding tangible and expeditious solutions. In this case, the basis for the strengthening of social capital is the interaction of kinship relations, allowing for the resolution of problems and conflicts. Social coexistence and tasks are based on community meetings where each individual gets involved, forming a front of common interest and community collaboration. The cultivation and sale of coffee

becomes the primary activity, demonstrating once again the relevance of the relationship with the ecological environment for the forms of social capital (see Tables 1 and 2).

Table 2. Factors that weaken the social cohesion of communities.

Incident Factors	Communities ¹			
	1	2	3	4
The existence of socioeconomic levels has given rise to deep poverty and lack of work that forces the people to migrate outside of Puebla (within Mexico) and to the United States to earn money to support their families	X	X	X	X
Economic support and technical training are insufficient and prevent adequate harvests	X	X	X	X
Land tenure issues	X	X	X	X
Lack of NGO organizations allow political parties to manipulate aid delivery	X	X	X	X
Theft of the weight of coffee and maize at the point of sale	X	X	X	X

¹ 1 = Chilococho del Carmen, 2 = Tepetitlan-Jonotla, 3 = Lipuntahuaca, 4 = Atlequizayan.

In order to refine the discussion of social capital among indigenous Totonac peoples, it is necessary to approach it from an epistemological perspective. While social capital is located in the relational sphere, it is useful to analyze the Totonac terms that relate to what has been called social capital in order to understand what their support networks are like and how these networks are implemented.

The results support two analytical axes that are worth highlighting, a social capital that is built around the Totonac that can sometimes involve the family, from which networks emerge from the political sphere. And another social capital that arises from a world of reciprocities that occurs within the Totonac family (nuclear family) and between close families (extended family), this interweaving of kinship relationships is woven and shapes the diversity of reciprocities practiced by the Totonacs, the most important of which are mentioned and described below.

To begin with, let us look at the concept of “liimakxtim”. This concept can be used in community social events such as the faena, which is the community work for the maintenance of the village; for example, to organise the dance of the voladores it is necessary to cut, drag and lift a tree that serves as a ritual for the dance, a ritual recognised as a UNESCO World Cultural Heritage site. Another activity described by the term “liimakxtim” has to do with the laying out and construction of stone paths. Stone roads are made in collaboration with all the people who usually pass through the place where the road is to be built, and if the road already exists, the people who travel along it clear it of weeds or rubbish, especially if the road crosses someone’s property or ranch. It is interesting to note that if private individuals do not participate in the maintenance of the road, they expose themselves to social sanction.

Another relevant concept is “laamaqaxoqo”, a term that literally translated means ‘payment with the hand’. It is what has been called in Spanish “mano vuelta”. This term is composed as follows: Laa- is ‘reciprocal’, maqa- comes from maqan ‘hand’ and xoqó is ‘pay’. The Spanish interpretation is that an individual ‘pays with the hand in a reciprocal way’. “laamaqaxoqo” consists of making up for the day’s work that other people put in to help another person. If a person invites someone to work, the guest will require to be reimbursed for that day spent helping. The payment can be through the same activity or with a different job, where the relevant thing is to make up for the day’s work donated. It is important to mention that in some cases there are actions that break the order of reciprocity, as either person may do less work or work for less time than was originally donated. These inconsistencies in payment are conceived as abuses and are often pointed out publicly as a form of sanction. Outside the workplace, the term “laamaqaxoqo” can be used when someone perjures another person. In response to the accusation of perjury, the expression “kamaqaxoqo” is used, which is interpreted as: ‘pay him with the same’, that is, if he hurts you, do him the same harm he did; for example, if you are stoned, stone the person who did it to you.

In the world of Totonac reciprocity, we also identify the concept “laamakatlaja” which means ‘to win with the hand reciprocally’. The word is composed as follows, laa- means ‘reciprocal’, maka- comes from makan ‘hand’ and tlajá ‘win’. It is similar to the word “laamaqaxoqo”; however, here it is not about returning the day’s work, but rather to replace or return something that was lent “laamakatlaja” has to do with “supporting and returning” the favour. For example, when a young man is getting married, he consults with his parents about the wedding. They approach immediate family members and visit the one who is also about to get married to ask for their help and ask them to help in whatever way they can to return the favour when they are in the same situation.

The term “liitlaan” which means ‘to do good’ is also important in the world of Totonac reciprocity. This concept is composed as follows: lii- is ‘reason’ and tlaan is ‘good’. When you are asked if they want you to return the favour you can answer “tsaj/kaj liitlaan” when you have no interest in being returned, it is simply to do good.

Another important term is “laataawaay” which means ‘reciprocity with food, recipro- cal eating’. Breaking down the concept we have: laa- is ‘reciprocal’ taa- is ‘something’, waay- is ‘to eat’. In a context of food reciprocity, Totonac indigenous women help by providing food, for example, this in the process of pregnancy of Totonac indigenous women.

DISCUSSION

Regarding the forms of mutual support, i.e., forms of help based on reciprocity, these have always existed in the Totonac world and we can say that

they survive today; however, some people incite not to practice them due to the abuses in such practices that we have mentioned above (Santiago Francisco 2020).

The ethnographic work allowed us to identify that the term poverty is not associated with the absence of material wealth as it is known in Western culture. In the context of Totonac culture, the term poverty refers to the absence of human capabilities. According to Santiago Francisco (2020), a Totonac is poor when he/she cannot read, write, listen or speak Spanish, among the Totonacs these indigenous people call themselves “luuta’aqxteqtamaniit” which means ‘he/she has been left far behind’.

Food reciprocity (in Totonac is ‘laataaway’) is a practice that is eroding in the region. According to Santiago Francisco (2020), indigenous women in gestation tend to share food reciprocally in quality and quantity; however, in the region it is progressively disappearing.

The diversity as forms of reciprocity in the Totonac indigenous group is little known, highlighting only the “mano vuelta” (Ellison 2017). The evidence derived from the analysis suggest at least five forms of reciprocity that constitute sources of social capital.

These forms of social capital are considered positive, but there are also forms of negative social capital. This negative social capital is most commonly identified through envy and muina (a form of negative emotion present in Totonac culture). According to Ichon (1990), some reconciliation rituals are described as “happiness”, in which the Totonacs must free themselves from these negative emotions in order to avoid illness, the discomfort of individuals or the community as a whole, or even to avoid the fatality of death. These emotions and feelings, as well as their traditional therapeutic treatments, coincide with our approaches and features of social capital but in a negative sense, keeping constant the cultural forms that allow us to identify concrete manifestations and actions of negative social capital.

In another order of ideas, we find the relationships that the Totonac establish with gods and owners that allow an ecological balance for the maintenance of their food strategies (Ellison 2017). The relationship between people and nature is fundamental and affects all social relations and all the dimensions that these relations imply, such as the economic, productive, food, family and spiritual aspects.

For the Totonacs, the relationship with nature is fundamental due to their millenary agricultural practices (Lugo-Morin 2022). However, the exploitation of natural resources understood from the episteme of Western societies is meaningless. This is because the dimension of relationship with nature is a central element of the relations between the Totonacs. As an example, we find the offerings to the owner of the forest called “Kiwiqolo”, understanding ‘qolo’ as old-wise and ‘kiwi’ as wood in allusion to the endemic mountain. It is important to highlight that this spiritual entity of the Totonacs has a corporeal presence in

the highlands but only takes care and governs the endemic forest or those crops that are in harmony with the endemic forest, such as some coffee plantations or some timber resources, but this entity has no influence or protection in the grazing lands, cattle pasture and extensive crops.

The “Kiwiqolo” is one of many entities with which the Totonacs often relate. He demands offerings to maintain the wellbeing of the relationship with nature, both with plant resources and endemic fauna, and at the same time he is an interlocutor in the face of natural disasters. Offerings, dances and other types of rituals in relation to this entity and its representation as an ambassador of nature, is a source of social capital due to the organization, cohesion and cooperation that their performance implies, at the same time as these practices become fundamental for the balance of the universe in the Totonac worldview.

On the other hand, traditional forms of relationships between people are likely to generate a source of social capital. Kinship relations in the Totonac context are identified in three senses; blood relatives, those understood as blood relatives and who share genetic information due to common descent and ancestry. Cognatic relatives, i.e., those whose relationship is anchored to marriage links and are known as in-laws and last but not least, ritual relatives who are those who, through secular or religious rituals, generate a type of kinship with obligatory and reciprocity in each of the actions involved in social relations: commonly ritual relatives have horizontal (cronyism) or vertical (godchildren and godparents) relationships. In the other possibility, when we refer to people from the same community, they are those neighbours and other people who belong to the same political-administrative entity that is often recognized as a community. People from the same community tend to have kinship relations among the Totonacs, although not in all cases and depending on the population size of the demarcation to which we are referring (Beaucage 2012).

The analysis of the results shows that social capital in the context of Totonac culture, reciprocity is relevant and represents a social construct that differs from the Western view. That is, while the hegemonic neo-liberal ideology reproduces individuals acting out of self-interest, in Totonac culture there is a strong tendency towards trust, respect and fair and just mutual aid. For example, the word ‘promise’ has a special meaning. It is referred to in Totonac with the phrase “qalhíi tachiwiin” which means “he has a word” and implies that he keeps what he says. In this respect, there underlies a distinctive epistemological and deontological positioning of the Totonac worldview whose implications have resonance in issues of broad scope and special interest in contemporary societies, an example of which is the conception of sustainability, which places entities such as Mother Nature or the Lord of the Mountain at the centre of productive activities, where tangible and intangible relationships are built between the Totonac people and their biocultural environment. In this sense, it is again observed that a fundamental principle in the relationship between the human

species and nature is reciprocity. In other words, in contrast to the Western view, reciprocity among the Totonac is not limited to interpersonal relationships (or groups of people) but also encompasses the environment. Thus, a line is opened that allows us to value the possibility of thinking and rethinking social capital as relations between individuals and with nature from the Totonac worldview.

CONCLUSIONS

The study allowed us to identify different forms of social capital, the most relevant of which are kinship relations, neighborhood relations, conflict relations, political relations and reciprocity relations. This last relationship constitutes an important source of social capital since in Totonac culture, reciprocity is not only with nature but also between people and these reciprocities are well identified and regulated in Totonac culture, which are mentioned and explained in linguistic terms in the results section.

The conception of sustainability in the context of Totonac culture places entities such as Mother Nature or the Lord of the Mountain at the centre of productive activities, where tangible and intangible relationships are built between the Totonac people and their biocultural environment. In this sense, it is again observed that a fundamental principle in the relationship between the human species and nature is reciprocity.

The relations with nature motivate different individual and collective actions that seek, above all, wellbeing for individuals without disrupting the order and harmony with nature. This can be understood as ecological balance in the exploitation of natural resources. Derived from this relationship with nature, interactions are established between the gods and owners, important entities in the Totonac worldview, since they govern the cycles of agricultural production, rain cycles and ritual cycles. These three cycles are interrelated and motivate and guide the actions to be carried out in order to maintain the order of reciprocity with nature. It is in the different rituals associated with reciprocity with nature that individuals bring into consideration various forms of social capital. Social capital derived from relationships with nature generates elements associated with community belonging, social cohesion, territorial belonging and appropriation, and participatory forms of environmental care. Forms of social capital serve the dual purpose of maintaining ecological balance while generating organizational action or social cohesion. From our western perspective, we separate both elements as a need to generate categories of analysis of social phenomena, but from the worldview of the Totonac peoples, social cohesion and care for nature are one and the same social dimension, as their culture is closely related to nature and hence the relevance of reciprocity.

The relations reciprocity due to their singularity, we speak of a world of reciprocity which is identified and distinguished within the Totonac family, its

existence is a source of the strategies of social and economic reproduction of this culture. Additionally, sources of negative social capital are identified in Totonac culture. This form of capital is visualized among the Totonacs through relations of conflict, these relations are built with envy and muina (a form of negative emotion).

In the Totonac worldview, the value of reciprocity that generates the manifestations of social capital, attends to different dimensions of existence, transcending the social order and influencing the spiritual world as well as the relationship with the ecological environment, maintaining these different dimensions as an interrelated whole, that is, a single system of social capital relations. The meaning of social capital in the indigenous context, at least in the Totonac culture, acquires a greater significance that transcends the economic meaning that has generally been given to it in Western culture.

Finally, it is important to recognize the contributions of the concept in the framework of western culture; however, the thousands of indigenous cultures existing on the planet offer us an opportunity to generate new knowledge about the interpersonal relationships of individuals and nature and to refine from western culture how we can reconcile our economic system with nature, this study could represent the beginning of a research agenda on social capital and its logics in the framework of the indigenous cultures that exist in the world.

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