Competitive Team-Based Learning versus Group Investigation with Reference to the Language Proficiency of Iranian EFL Intermediate Students

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This paper is a report on an experimental study which intended to look into the possible effects of Competitive Team-Based Learning (CTBL) vis-à-vis Group Investigation (GI) method of Cooperative Learning (CL) on the language proficiency of Iranian EFL intermediate students. Seventy homogeneous Iranian intermediate students were selected out of a total population of 110 to serve the present study. The results of the study indicated the advantage of CTBL over GI in terms of its effect on improving the target group’s language proficiency. The results of the study were in contrast to the reports of researchers like Ab-Raza (2007), an Israeli language specialist, who have argued that students in Islamic countries “do not value diversity of ideas, beliefs, and perspectives” (p. 5) and so cannot be taught through modern methods like those of CL.

Keywords: Competitive Team-Based Learning, Group Investigation, Language Proficiency, Learning As A Liberating Agent, Learning

INTRODUCTION
Notwithstanding the importance of English as an international lingua franca in today’s world context, English Language Teaching (ELT) has not achieved its ultimate expectation in most parts of the world including Iran. The roots of this fiasco can be traced in traditional instructional methods applied in our classrooms. Most of educational concerns are focused on the academic achievement of learners regardless of the context of learning which greatly affects the implementation, results, and success of methodological innovations in language teaching. According to Vygotsky (1978), context of learning has the potentiality to either facilitate or even hinder academic achievement to a great extent. The fact is that most of the present methods of Cooperative Learning (CL) by disregarding the important roles of 1) inter-group competition, 2) individual accountability, and 3) involvement of all learners in the learning process are just likely to inhibit rather than promote learning. These three factors greatly affect the process and consequently the outcomes of learning in cooperative learning situations. Competitive Team-Based Learning (CTBL) comes to address the significance of these factors in collaborative learning environments.

FOCUS OF THIS STUDY
In this study the author chose his innovative approach, CTBL, to be compared with GI method of CL, developed by Sharan and Sharan at Tel Aviv University in Israel. He selected these methods because they have worked well particularly for his language courses in primary schools. This time he decided to compare their effects at collegiate level.

**Group Investigation**

Sharan and Sharan (1992) have developed Group Investigation (GI) at Tel Aviv University, in Israel. This method is one of the rare CL methods that gives considerable freedom to participants. Students, in this method, have the latitude to decide on the composition of their teams, assign their roles and responsibilities, establish and clear the norms and their desired behaviours, and set their goals. Students form their own favourable two- to six-member groups to work cooperatively for conducting their group projects, and thereby, achieving their shared goals. The teacher’s role seems to be less intrusive in this method. GI involves cooperative group inquiry emphasizing data gathering by students, interpretation of information through group discussion, and synthesis of individual contributions into a group project. Another distinguishing characteristic of the method is its attempt to eliminate competition among participants.

At the class level, as in most CL methods, the instructor is expected to introduce the method and its basic principles, shed light on the objective of the course, explain scoring system, and help students form their teams in the first session. Like any other method of CL, the class presentation can be a lecture or any other kind of demonstration like brief plays and brainstorming techniques supported by a slide, a video, or an internet show. Summarising the important features of GI, Sharan and Sharan put forth four critical components of their method as illustrated in Figure 1:

![Figure 1: Main components of GI](image)

Accordingly, in GI classroom, teams, first, get together and investigate topics from a wide range of topics, which are to be covered during a term, and select their favourable topics. Then individual teams plan and decide what to seek for in the topic, how to go about it, and how to divide the work among them in order to carry out the group research or task. During the course, they collaborate in activities like analysing and evaluating the data they gather from several sources. They discuss their work in progress and exchange ideas and information in order to expand, clarify, and integrate them. After each individual finishes his task, the group pools the findings and tries to reach consensus to produce a group report, demonstration, play, or exhibition. In the final session, each group makes a presentation or display to share its findings with the entire class.
class. The belief is that collective achievement of shared goals brings with it a kind of intrinsic motivation.

As regards the evaluation system of GI, self-evaluation, peer assessment, and teacher evaluation are utilized in order to supply appropriate feedback to students’ further development. For example, while a group is presenting its report, other groups have the opportunity to evaluate the clarity and professional quality of their presentation through observation and posing questions with reference to their areas of concern and interest. The final evaluation of groups is based on the quality of their group performance during the semester, which strongly aims at developing positive interdependence among group members.

COMPETITIVE TEAM-BASED LEARNING

The author developed CTBL in 2000 (see also Hosseini 2012). CTBL is a holistic contextualized approach to teaching and learning that reflects the real world holism. As a fundamentally different approach to ELT/ Education, CTBL tries to produce a more realistic depiction of the real-world norms and settings in the classroom, as the microcosm, in order to more effectively connect learners to the real world, the macrocosm. This way CTBL reduces the discrepancy between what the present education system makes out of our nations and what the realities of today world context exacts them to be. CTBL foregrounds the significance of effective teamwork amidst highly competitive environments, as the very demand of tomorrow’s citizenry, in an atmosphere which emphasises adherence to a ‘learning culture’ not only to foster academic progress of students but also to more significantly contribute to their future success, both academically and socially.

In classes run through CTBL, students of potentially diverse backgrounds with different attitudes, (language) learning strategies, styles, proficiencies, and abilities shape heterogeneous teams of usually 4 members each and try to work together in a highly competitive motivational dialogic-based learning environment. They work in an atmosphere which emphasises their adherence to some pre-established principles (i.e., this author’s ethos and manifesto – see Hosseini, 2012). The mechanism underlying this educational approach holds each team member accountable for his own learning, growth, and development and encourages them to do their part of the work effectively. It, at the same time, spurs them to ask other members to do likewise and also help them enthusiastically in order to improve their learning towards achieving their common learning goals. Team members are likewise systematically spurred into further collaboration and scaffolding the learning of each other in order to compete not merely against their same-level opponents in other teams, as it is in Teams-Games-Tournaments (TGT), developed by Scholars like DeVries and Edwards (1974) and Slavin (1991), but also against their teams. All team members, therefore, engage themselves fully (cognitively, emotionally, and intellectually) and actively participate and tactfully contribute in the process of shared learning in order to solve a problem, complete a task, and/or create a product through activities like exchanging ideas, clarification of meanings to each other, and diplomatic resolution of discrepancies. They try to ensure
that each member has mastered the assigned material for this author, as the teacher, would, at times, randomly call upon a student to represent his team. If so, the selected member of the respective team should also provide reasons for his answer(s) to the teacher before the class participants.

Although in CTBL team members take final exams individually as it is in CIRC, STAD, and TGT, they take midterm exams, tests or quizzes – but not finals - cooperatively. The main philosophy beyond allowing students to take some exams, tests or quizzes collaboratively is to subordinate testing to teaching. Apart from its contribution to positive interdependence, this strategy subjects students to more opportunities for transference of skills, strategies, thinking styles and approaches, attitudes, and so forth in a meta-cognitive way (e.g., through listening to their teammates who are in actual fact thinking aloud).

It is important to note that teams are evaluated not just on their members’ improvements over their own past performances, as it is in Cooperative Integrated Reading and Composition (CIRC), developed by Stevens et al. (1978), and Student Teams-Achievement Divisions (STAD), developed by Slavin and associates at Johns Hopkins University (1978). Nor are they evaluated merely over their same-level opponents in other teams, as it is in TGT. They are also recognized based on the extent to which they outgain other teams. Further, special rewards are also awarded to the best teams with the highest averages in order to motivate team members for more effective cooperation, and simultaneously encourage competition among teams. For example, teams that prove their superiority for three periods will receive ‘A’ marks for their members’ final exam regardless of their actual grades – on the condition that they secure the minimum standard. Although appreciation of the best team(s) is also valued in some methods like STAD, TGT, and Teams Tournaments (TT), developed by this author (Hosseini 2012), this component is not as much seriously and directly injected in these methods as it is in CTBL. Recognition of the best team(s) is a formal part of CTBL evaluation system.

Likewise, to maximize the contribution of the captains or team leaders, who are high achievers, to the success of their teams, they will be rewarded with high marks as the recognition of their devotion, perseverance, and commitment to their responsibilities and tasks if all their team members shine on tests and exams and prove an acceptable progress in comparison to their past performances. Teams’ performances are also regularly reported on a teams’ recognition chart on the notice board of the classroom which as well announces the names of outstanding and most challenging individuals alike. Besides, the first two to six, depending on the number of students in the class, best students are recognised as the brains or motivators who will assist this author, as the teacher, in course of teaching. When teams have problems, for instance, they must consult the brains first. The teacher is the last resource. The brains openly receive the teams’ representatives for any kind of academic help. The important point is that every main exam’s results lead unto the replacement of these brains as well as teams’ leaders by those who prove their superiority over them, in CTBL learning-for-all fair
environments. To lessen individuals’ anxiety levels or to contribute further to lowering their affective filters, teams that secure the least acceptable rank would pass the course—provided their members should not be below the minimum standard. The average of teams members’ grades is the basis for this decision.

CTBL evaluation system, thereby, not only pushes team members to make any effort to improve their own performances and outperform their peer-level opponents in other teams. It also encourages them to pool their efforts together to surpass other teams as well in order to prove their fair superiority in the class and get the special rewards, which may include securing the highest mark for all team members in recognition of their effective collaboration and perseverance.

One more thing that should be reminded is that the evaluation system of CTBL is against undifferentiated group grading for teamwork as it is in specialists like Sharan and Sharans’ methods where all team members receive the same grade regardless of differences in contributions to the total-team/class effort. In CTBL, motivational incentives are encouraged to sustain the individual efforts and immersion in the process of learning in team activities and furthering cooperation of team members in the course of learning.

As understood, contrary to the conventional methods and approaches, the procedure in classes run through CTBL is not a ‘loose anything goes’ one. It is highly structured and systematic. The focus is on bringing individual responsibility among all team members and encouraging competition among teams for further involvement and co-operation of team members. For the summary of the procedure followed in a (reading) class run through this author’s instructional approach, see Figure 2.

Figure 2: Main components of CTBL
As indicated in Figure 2, the procedure for presenting a unit/lesson, in CTBL classes, follows two phases each of which incorporates five main components. As it is realised, the activities follow a regular cycle.

**QUESTION RAISED**

The following question is suggested:

Q: ‘Is there a difference between the Iranian intermediate students who have been taught with CTBL and those who have been taught with GI in regard to their language proficiency (vocabulary, grammar, reading comprehension, and pronunciation)? The author selected these CL methods (i.e., CTBL and GI) to be compared due to the fact that these methods are among the most popular methods of CL. Also, he selected the mentioned areas of proficiency because the focus of the teaching materials he uses in his classes is on them.

A null hypothesis was suggested for the above question.

**METHOD**

**Subjects**

The subjects of this study were Iranian EFL intermediate students. Through administering the NELSON English Language test to 110 students at Bojnord Azad University, in Iran, 70 students were chosen for the purpose of this study. The author selected the NELSON test because Iranian students are familiar with this test. It should also be mentioned that the 70 participants who were nearly at the midpoint were selected for this study. The subjects were randomly (i.e., every other one) classified into control and experimental groups. Thirty five students took part in each group. The author selected 35 students to meet the criterion for the number of participants in experimental researches.

**Instrumentation**

*Language Proficiency Test*

In order to make sure of the homogeneity of the control and experimental groups in terms of English language proficiency, a test of NELSON, series 300B, after being piloted on a similar group of 30 students, was administered. The test consisted of four parts: cloze tests (reading comprehension), grammar, vocabulary, and pronunciation. The time allotted for intermediate students, by the test designers, was 35 minutes.

**Materials**

In this study, the students’ own textbook, New Interchange, developed by Jack C.Richards was used. The author applied this textbook because it was part of the
syllabus in the University. Fortunately, it was useful for the purpose of the present study as it intends to improve language proficiency of the students.

**Design and Procedure**

A 'pre-test post-test control group design' was the blueprint of the procedure in the present study. In order to homogenize the participants according to their language proficiency levels, the pre-test was administered to the available 110 students in the first session. On the basis of the information obtained, 70 students who were nearly at the midpoint were chosen as the key informants. The author selected the average participants because it is this group that represent majority of the students in our universities. The selected subjects were randomly assigned to two groups: experimental and control groups. In the GI class students were allowed to form their own teams. However, in the experimental group, teams were formed in such a way to involve learners with a range of language proficiency levels. Then the importance of both the methods were explained and highlighted in the respective groups. During the semester, both the classes had the same instructor, the same curriculum, and the same schedule of instruction except that in the control group students learnt through GI whereas in the experimental group students experienced learning the English language through CTBL.

**DATA ANALYSIS AND INTERPRETATION**

Analyses of the select parameters were done using Statistical Presentation System Software (SPSS) package (SPSS 2011 December). Analysis of Variance was used to determine the significance of the findings of the study with reference to each of the select dependent variables.

An independent t-test was used to verify the pre-test results on both the groups. See table 1.

### Table 1: The t-value for the pre-test of the two groups

<table>
<thead>
<tr>
<th></th>
<th>T. C.</th>
<th>D. F.</th>
<th>2-tail p.</th>
<th>T. O.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>58</td>
<td>0.05</td>
<td>-0.21</td>
</tr>
</tbody>
</table>

The value of the calculated t was -0.21 which was less than the value of the t-critical (2) at 0.05 level of probability. Therefore, the two groups were almost homogeneous.

The results of computing the means of the pre- and post-test of the 'control group' indicated that there had been a little progress in this group. As indicated in table 2, a matched t-test was conducted in order to find out the significance of the difference.

### Table 2: Paired t-test for the control group

<table>
<thead>
<tr>
<th>Group</th>
<th>X1</th>
<th>X2</th>
<th>S1</th>
<th>S2</th>
<th>D. F.</th>
<th>T-ob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cont. G</td>
<td>17.76</td>
<td>21.16</td>
<td>2.93</td>
<td>5.42</td>
<td>29</td>
<td>-6.8</td>
</tr>
</tbody>
</table>

P \leq 0.05  t-critical 2.045
The results showed significant difference between the control group performances on both the tests, because the observed $t$ of -6.8 at a probability level of $P \leq 0.05$ exceeded the critical $t$ of 2.045.

The means gained from the pre- and post-test of the experimental group were also calculated. The results indicated a remarkably high difference which confirmed the influence of CTBL on the language proficiency of Iranian intermediate students. Also, to be sure of the results another paired $t$-test was conducted. See table 3.

Table 3: Paired $t$-test for the experimental group

<table>
<thead>
<tr>
<th>Group</th>
<th>$X_1$</th>
<th>$X_2$</th>
<th>$S_1$</th>
<th>$S_2$</th>
<th>D.F.</th>
<th>$T$-ob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp. G.</td>
<td>17.6</td>
<td>25.5</td>
<td>2.95</td>
<td>3.95</td>
<td>29</td>
<td>16.8</td>
</tr>
</tbody>
</table>

$P \leq 0.05$ t-critical 2.045

This time the $t$-observed (16.8) far exceeded the value of $t$-critical (2.045) at a probability level of $P \leq 0.05$. This supported the aforementioned assumption that CTBL had a significant impact on the target group's language proficiency.

At this stage, the means, standard deviations, and variances of two groups in post-test were obtained. See table 4.

Table 4: Results of post-test for both the groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>$X$</th>
<th>SD</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp. G.</td>
<td>25.5</td>
<td>3.95</td>
<td>15</td>
</tr>
<tr>
<td>Cont. G.</td>
<td>21.16</td>
<td>5.46</td>
<td>29.3</td>
</tr>
</tbody>
</table>

The differences between the means showed a significant difference between the two groups. A careful comparison of the standard deviations and variances of the two groups indicated that the control group tended to be heterogeneous whilst the experimental group tended to be homogeneous. This refers to the fact that the mechanism in CTBL class (experimental group) encouraged high achievers to assist lower performers in the course of shared language learning. That is why lower performers improved their language proficiencies to a greater extent and so teams became more homogeneous at the end of the semester. Now it seemed that the null hypothesis was firmly rejected.

To be sure, the post-test results were subjected to an independent $t$-test. This has been shown in table 5.

Table 5: The $t$-value for the post-test of the two groups

<table>
<thead>
<tr>
<th>$T$. C.</th>
<th>D.F.</th>
<th>2-tail $p$.</th>
<th>$T$. O.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>58</td>
<td>0.05</td>
<td>16.8</td>
</tr>
</tbody>
</table>

Since the $t$-observed of 16.8, at a probability level of $P \leq 0.05$, far exceeded critical $t$ of 2, the null hypothesis was firmly rejected. Therefore, the result of the independent $t$-test confirmed the positive relationship between CTBL and the language proficiency of...
Iranian intermediate students. Now, compared with the GI class, it could be claimed that CTBL brought far better improvements in the language proficiency of Iranian intermediate students.

CONCLUSION and CLOSURE

The present study confirmed the superiority of CTBL over GI in terms of its effect on improving the target group’s language proficiency. In the CTBL class, the involvement of not just the minority of the students - usually the cleverer ones, as it was in GI class, but the majority of them in the process of learning was impressive. This was because everyone felt accountable not only for their own learning but for the learning of their teammates as well, in the motivating learning environment CTBL provided for them. To put it another way, in CTBL class, individual team members were motivated to surpass not only their same-level opponents in other teams but also other teams.

The mechanism underlying CTBL provided all team members not just with the opportunity but with the need for perseverance, collaboration, and joint activity as well. CTBL also intended to keep all teams in a state of dynamic perseverance in a win-win situation for all learning and social atmosphere in the classroom which was highly supportive, relaxing, communicative, referential, effective, and developmentally motivating and appropriate. Such productive and engaging learning conditions, which ensure and scaffold involvement of all learners in the process of shared (language) learning, not merely generate short-term results along with learning and excellence in the learning. They also supply students with the opportunities to acquire and internalise more effective tactics and methods for obtaining knowledge and solving problems, and in the process develop their communicative competence. Furthermore, such situations stimulate students to more effectively and comprehensively exercise their brain cells in higher order and incisive analytical thinking skills rather than lower forms of mental behaviour/thinking, and, in the process, come up with fresher, more innovative, and more powerful ideas, in order to construct new knowledge.

What is of significant importance is that the results of the present study are in contrast to the reports of researchers like Ab-Raza (2007) who have argued that students in Islamic countries “do not value diversity of ideas, beliefs, and perspectives” (p. 5) and so cannot be taught through modern methods like those of CL. He has reasoned so because he believes Islam wants them and trains them to be so. He has also concluded that Muslim teachers are following behaviorists’ principles and approaches in their classes because such philosophy, in his perception, originates from The Koran, our holy book! It is worth mentioning that it is not ‘students’ but some ‘rulers/despots’ in the arena of Islamic countries that do not value diversity of ideas, beliefs, and perspectives, by, for instance, ‘marginalising and even torturing thinkers’ in order to keep the society, their possession!, blind. The fact is that the true spirit of real Islam appreciates diversity and accommodates different ideas, beliefs, and perspectives. Islam is aware of hegemonic forces that cause marginalization, alienation and oppression and so is never averse to cooperation, consultation, negotiation, and consideration of diverse ideas. In addition to this study, in his MA and PhD research studies the author closely observed the high zest
of his students for co-operation and collaboration. They were highly motivated to share their ideas and pool their efforts together for the success of their teams.

One last thing that should be reminded is that the paradox and of course the beauty of the author’s didactic innovation refers to the fact that despite its surface structure, which seems to best benefit high achievers who are in the habit of dominating their milieu, it is, in fact, an approach to harnessing this groups’ potentials to the best advantage of the lower performers without yet neglecting the former groups’ zest and motivation for continuing to shine as the best in learning/living-for-all environments. CTBL is, thereby, in essence, an approach to the empowerment of the oppressed, who are almost always the majority in today’s world context of injustice, corruption, treachery, racism, and despotism. And the point is that the empowerment of the Other contributes to their emancipation which results in the transformation/elimination of the dictators, who have been in the habit of treating them as their possessions!

Therefore, CTBL should not be overlooked by educators particularly in the so-called Third World or developing countries, say Islamic countries, as it insists on defeating the banking concept of education and ceaselessly endeavours to promote learning as a liberating agent that ensures and celebrates freedom and dignity of the learner as a collective experience (Hosseini 2012). Further researches should be conducted to indicate the significance of CTBL through different dimensions, in the arena of Education in general, and in the field of ELT in particular, for today world context of competition.

Note: For a comprehensive analysis, evaluation, and understanding of the Banking Method, Interactive Learning methods, and particularly CTBL, its implementation in real classroom situations, theoretical foundations, design, syllabus, tasks, activities, strategies, evaluation system, teachers/learners’ roles, etc., and also for the philosophies beyond the implementation of such methods and approaches in the present didactic regimes, see Hosseini, 2012.

REFERENCES


**Turkish Abstract**

İranlı Orta Düzey İngilizce Öğrenen Öğrencilere Referansla Grup Gözlemine Karşı İşbirlikçi Takım Tabanlı Öğrenme

Bu çalışma İranlı İngilizce öğrenen orta düzeydeki öğrencilerin dil yetenekleri üzerine İşbirliğiği Öğrenme (İÖ) metodu Grup Gözlemine (GG) göre Rekabetçi Takım Tabanlı Öğrenmenin (RTTO) muhtemele etkilerini araştır bir deney sel çalışmadır. Çalışma için 110 toplam öğrenciden orta düzeyde homojen 70 öğrenci seçilmiştir. Çalışmanın sonuçları hedef grubun dil yeteneklerini geliştirme üzerinde RTTO’nün GG’ye göre daha avantajlı olduğunu göstermiştir. Çalışmanın bulguları “İslami ülkelerdeki öğrencilerin fikirlerin, inançların, ve perspektiflerin çeşitliliğine değer vermediği ve İÖ gibi modern metodlarla öğretilemeyeceğini” (p. 5) savunan Ab-Raza (2007) gibi araştırmacıların bulgularıyla ters düşmektedir.

**Anahtar Kelimeler:** İşbirlikçi Takım Tabanlı Öğrenme, Grup Gözlemi, Dil Yeterliği, Özgürleştirici Etken Olarak Öğrenme

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**French Abstract**

L’Apprentissage Basé sur l’Équipe Competitif contre le Groupe d’Enquête en ce qui concerne la Compétence de Langue d’Iranien EFL Étudiants Intermédiaires

Cet article est un rapport sur une étude expérimentale qui a eu l'intention d'examiner les effets possibles d'Apprentissage Basé sur l'Équipe Compétitif (CTBL) vis-à-vis le group d’enquête (GI) la méthode d'Apprentissage Coopératif sur la compétence de langue d'Iranien EFL étudiants intermédiaires. Soixante-dix étudiants intermédiaires Iraniens homogènes ont été choisis d'une population totale de 110 pour servir l'étude présente. Les résultats de l'étude ont indiqué l'avantage de CTBL sur le G.I. en termes de son effet en amélioration de la compétence de langue du groupe cible. Les résultats de l'étude étaient par contraste avec les rapports des chercheurs comme Ab-Raza (2007), un spécialiste de langue israélien, qui a soutenu que les étudiants dans des pays Islamiques "n'estiment pas de diversité d'idées, des croyances et des perspectives" (p. 5) et ne peut pas si être enseigné par des méthodes modernes comme ceux de CL.

**Mots-clés:** Apprentissage Basé sur l’Équipe Competitif; Group d’Enquête; Compétence de Langue; Apprenant Comme un Agent de Libération; Apprentissage

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**Arabic Abstract**

التعلم التنافسي للفريق مقابل تحقيقات المجموعة بالإستناد إلى مهارة اللغة للإيرانيين المتعلمين اللغة الإنجليزية كلغة أجنبية من الطلاب في المرحلة المتوسطة

الذي يعتمد على التعليم وبيح أسلوب التعليم المنافس أو يتحدث عن دراسة تجريبية للتأثيرات المحتملة للفرق المنافس

بتلخيص كامع 느낌 الدراسة مكون من 110 من الطلاب أو التعاوني على كفاءة اللغة لطلاب الإيرانيين للمرحلة المتوسطة.

المكان و كنتية تحسن في اللغة.

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