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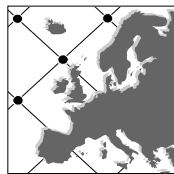
Working papers

Measuring National Identity

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Arbeitspapiere

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Editorial Note:

Dr. Waldemar Lilli, Professor of Social Psychology at the University of Mannheim, and Dr. Michael Diehl, Professor of Social, Organisational and Personal Psychology at the University of Tuebingen, worked together for several years at the Mannheim Centre for European Social Research (MZES) on processes of social identity.

Abstract

This paper is on the development of a theoretically based national identity measure. Two empirical studies with 200 participants were carried out to show that the more generally conceptualised Collective Self-Esteem Scale (CSES) by Luhtanen & Crocker (1992) provides indeed a proper base to aim at a more specific measure of national identity. However, in order to really include all those crucial aspects which, according to Social Identity Theory (Tajfel & Turner, 1986), seem necessary in defining a collective identity like the national one, the scale was completed by the aspect of comparison-to-relevant-outgroups. In fact, this completion led to a substantial increase in variance explained by the new scale compared to the CSES.

6 tables and 1 picture give detailed information about respective data patterns.

Contents

1   Introduction

This study aimed to develop a theoretically based measure of national identity. In our work we referred to the collective self-esteem scale (CSES, Luhtanen & Crocker, 1992) which, in some line with Tajfel & Turner's (1986) conception of social (collective) identity, seems a suitable approach in measuring global, relatively stable levels of belongingness to relevant social categories like gender, race, ethnicity or nation.

In order to fit the unspecific item formulations of the CSES (e.g. 'the group I belong to') to the specific social category under investigation we first altered several wordings and substituted 'group' by 'nation' in all necessary cases (e.g. 'the nation I belong to'). Moreover, an inspection of the identity aspects covered by the scale showed, however, that comparison to relevant outgroups, a crucial aspect within the social identity concept, was not found included in the CSES. In preparing a national identity measure we therefore attempted to fill this gap by adding certain items to the CSES in the hope to complete the scale in this theoretically important respect.

2   Some Considerations in Conceptualizing National Identity

We can only speculate why Luhtanen & Crocker did not pay much attention to this important aspect in their CSES. Perhaps their scale was much more designed as a collective counterpart to the Rosenberg (1965) personal self-esteem scale (SES) and less strictly inspired by the social identity concept. This is apparently the case; in their own words, the authors characterize their scale as an attempt "...to assess global, relatively stable levels of collective self-esteem, parallel to scales (e.g. Rosenberg, 1965) that measure global, relatively stable personal self-esteem" (Luhtanen & Crocker, 1992, p.304).

While these authors intended to create a basic, global measure that fits in the same way to a whole variety of ascribed memberships like gender, race or ethnicity, our focus was restricted on the single category of nation. The question was whether the CSES would in so far cover all the other instances of a conceptually based national identity measure.

In line with their general conceptualisation Luhtanen & Crocker (1992) repeatedly found the same 4-factorial solutions in different studies. The resulting factors, including 4 items each, were defined as **membership** (a person's worth for or contribution to the ingroup), **private** (a person's view of the ingroup's value), **public** (other persons' view of this group) and **identity** (contribution of ingroup-membership to the self-concept of the person).

With the exception of the comparison to outgroups we found the CSES to sufficiently representing the conceptually most important aspects in measuring national identity, especially, the group's contribution to the self-concept, ingroup-membership, personal (or inside) and others (or outside) views of the group in question.

3   Procedure and Collection of Data

A total sample of 150 (in fact: 200) student subjects, drawn at the universities of Mannheim and Tuebingen, took part in two studies.

In the **first study** we tested whether the structure of the original CSES, also found by Wagner & Zick (1993) with German samples, would again replicate with reformulated items where -as mentioned above- the word 'group' was replaced by 'nation' in all cases.

In the **second study** we added 4 pre-selected items to the CSES item body of which we hoped to represent the missing aspect of comparison to relevant outgroups.

The same procedure was used in both studies. After a more general introduction to the aim of the study, all subjects got the following instruction: *'We are all members of different social groups or social categories. One of the social categories one belongs to is the **own nation**. We ask you now for strictly concentrating on your belongingness to this nation during the whole study. Please give your very personal answer to each of the following items'* (see Luhtanen & Crocker,1992, p.305).

Subjects received a questionnaire including a series of either 16 (study 1) or 20 (study 2) randomly ordered items and were advised to make their judgements on 8-point scales (1=strongly agree, 8=strongly disagree) instead of 7-point scales used by Luhtanen & Crocker.

4   Results of the First Study

Data of 96 subjects were available for computations. **Table 1** gives the results of varimax rotated factor analyses of our data and -in parentheses- those of Luhtanen & Crocker (1992, p.307) found in their study 1. In the same manner, reliability analyses and subscale correlations are shown in **table 2.**

Table 1

Subscales and Items[a]	Factor Loadings[cd]				
	Me	Pr	Pu	Id	R²
					18%
Membership					
I am a worthy member of the nation I belong to (11)[b]	.82 (.68)				
I feel I don't have much to offer to the nation I belong to (19)	.72 (.76)				
I am a cooperative participant in the nation I belong to (3)[b]	.71 (.55)			(.40)	
I often feel I'm a useless member of the nation I belong to (6)	.75 (.75)				
					17,74%
Private					
I often regret that I belong to this nation (13)		.74 (.83)			
In general, I'm glad to be a member of the nation I belong to (15)[b]	.42 (.40)	.58 (.62)			
Overall, I often feel that the nation of which I am a member is not worthwhile (4)	(.36)	.76 (.59)			
I feel good about the nation I belong to (18)[b]	.44 (.44)	.68 (.54)		(.30)	
					11,28%
Public					
Overall, my nation is considered good by others (9)[b]			.85 (.72)		
Most people consider my nation to be more ineffective than other nations (20)		.54	(.76)		
In general, others respect the nation that I am a member of (2)[b]			.87 (.78)		
In general, others think that the nation I am a member of is unworthy (21)		.66	.44 (.78)		
					16,42%
Identity					
Overall, my nation has very little to do with how I feel about myself (14)				.78 (.72)	
The nation I belong to is an important reflection of who I am (1)[b]				.61 (.74)	
The nation I belong to is unimportant to my sense of what kind of person I am (16)				.77 (.77)	
In general, belonging to this nation is an important part of my self-image (10)[b]				.85 (.75)	

R²Total = 63,43% (60,7%)

a. The number in parentheses indicates the sequence of items in the scale.
b. Item was reversed for scoring
c. Only factor loadings equal to or greater than .30 are indicated
d. Numbers in parentheses refer to the Luhtanen & Crocker CSES (1992, Study 1, N=887)

Table 2

Reliability analysis of the reformulated CSES

Scale	Membership	Private	Public	Identity	Total
Scale M	24.02 (22.67)[a]	24.82 (22.85)	23.56 (21.44)	14.98 (18.73)	87.23 (85.69)
Scale SD	4.70 (3.42)	4.91 (3.45)	3.66 (3.95)	6.16 (4.95)	13.24 (11.67)
Mean Inter-Item Correlation	.49 (.41)	.56 (.45)	.34 (.51)	.46 (.45)	.23 (.29)
Alpha	.79 (.73)	.83 (.74)	.68 (.80)	.77 (.76)	.82 (.85)
Standardised item alpha	.79 (.73)	.83 (.77)	.67 (.81)	.77 (.77)	.83 (.87)

Note: There are four items in each subscale, N=96
a   Number in parentheses refer to the Luhtanen & Crocker study 1 (N=887)

Subscale Correlations

Scale	Private	Public	Identity	Total
Membership	.48** (.59)[a]	.26* (.40)	.12 (.37)	.66** (.76)
Private		.41** (.46)	.317** (.41)	.80** (.80)
Public			.152 (.23)	.58** (.69)
Identity				.67** (.73)

Note: There are four items in each subscale, N=96
a   Number in parentheses refer to the Luhtanen & Crocker study 1 (N=887)
*p<.05, **p<.01

Taken together, the replication of the CSES with reformulated items was obviously successful. As can be easily found on tables 1 and 2, our data patterns were in very good accordance with those of Luhtanen & Crocker in all respects.

5   Results of the Second Study

The following results refer to only one (n=49) of two parallel samples drawn in Mannheim and Tuebingen because of certain confusing problems with item recodings we have not resolved until now.

Table 3 informs about the results of a varimax rotated factor analysis referring to the 20 items questionnaire. Furthermore, **Table 4** gives detailed informations about reliabilities and subscale correlations. Additionally, **picture 1** illustrates relationships between subscales and the national identity scale as a whole.

Table 3

Subscales and Items[a]	Factor Loadings[c]					
	Me	Pr	Pu	Id	Co	*R²*
						14,1%
Membership						
I am a worthy member of the nation I belong to (11)[b]	.83					
I feel I don't have much to offer to the nation I belong to (19)	.87					
I am a cooperative participant in the nation I belong to (3)[b]	.61			.32		
I often feel I'm a useless member of the nation I belong to (6)	.69			-.39		
						14,8%
Private						
I often regret that I belong to this nation (13)		.76				
In general, I'm glad to be a member of the nation I belong to (15)[b]		.70		.48		
Overall, I often feel that the nation of which I am a member is not worthwhile (4)		.86				
I feel good about the nation I belong to (18)[b]		.79				
						10.43%
Public						
Overall, my nation is considered good by others (9)[b]			.86			
Most people consider my nation to be more ineffective than other nations (20)					.77	
In general, others respect the nation that I am a member of (2)[b]			.85			
In general, others think that the nation I am a member of is unworthy (21)		.50	.44		.39	
						17,3%
Identity						
Overall, my nation has very little to do with how I feel about myself (14)				.75		
The nation I belong to is an important reflection of who I am (1)[b]				.71		
The nation I belong to is unimportant to my sense of what kind of person I am (16)				.86		
In general, belonging to this nation is an important part of my self-image (10)[b]				.86		
Comparison						
The nation I belong to is superior to other nations in many respects (7)[b]				.44	.56	11.52%
All in all, my nation becomes less important in the world (8)	.41				.46	
Overall, the nation I belong to plays a more important role than other nations (17)[b]				.46	.59	
In competition with others my nation comes off worse					.66	

$$R^2_{Total} = 68.04\%$$

a. The number in parentheses indicates the sequence of items in the scale.
b. Item was reversed for scoring
c. Only factor loadings equal to or greater than .30 are indicated, N=49

Table 4

Reliability Analysis of the National Identity Scale

Scale	Membership	Private	Public	Identity	Comparison	Total
Scale M	24.80	25.35	23.39	15.76	21.76	111.06
Scale SD	3.87	4.94	3.65	6.53	4.60	15.39
Mean Inter-Item Correlation	.48	.59	.35	.57	.21	.21
Alpha	.79	.85	.69	.84	.84	.84
Standardized item alpha	.79	.85	.69	.84	.84	.84

Note: There are four items in each subscale, N=49

Subscale Correlations

Scale	Private	Public	Identity	Comparison	Total
Membership	.32*	.20	-.04	.32*	.48**
Private		.44*	.31*	.36*	.74**
Public			.12	.47**	.62**
Identity				.33*	.64**
Comparison					.75**

Note: There are four items in each subscale, N=49
*p<.05, **p<.01

Picture 1

National Identity Scale by Membership Subscale

National Identity Scale by Private Subscale

National Identity Scale by Public Subscale

National Identity Scale by Identity Subscale

National Identity Scale by Comparison Subscale
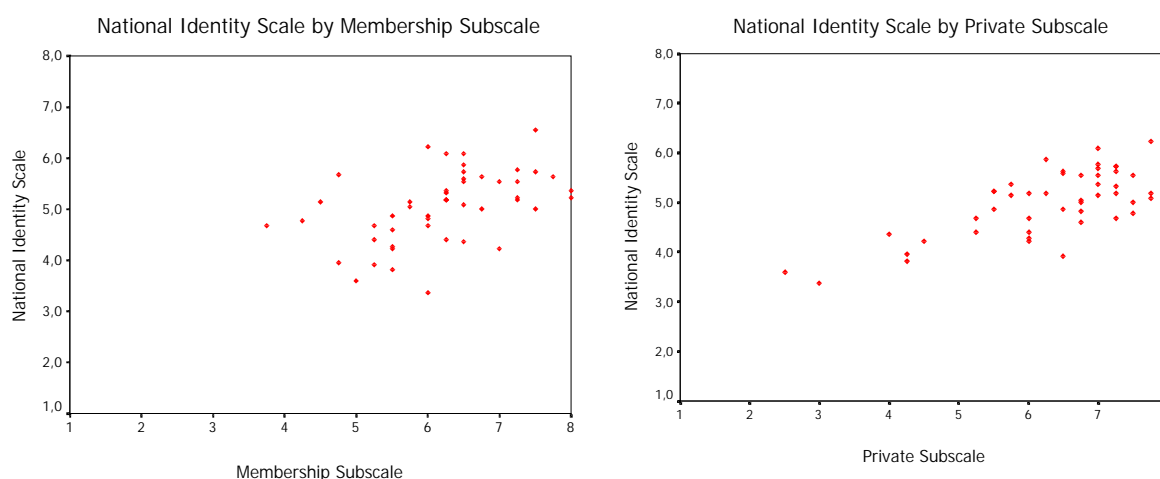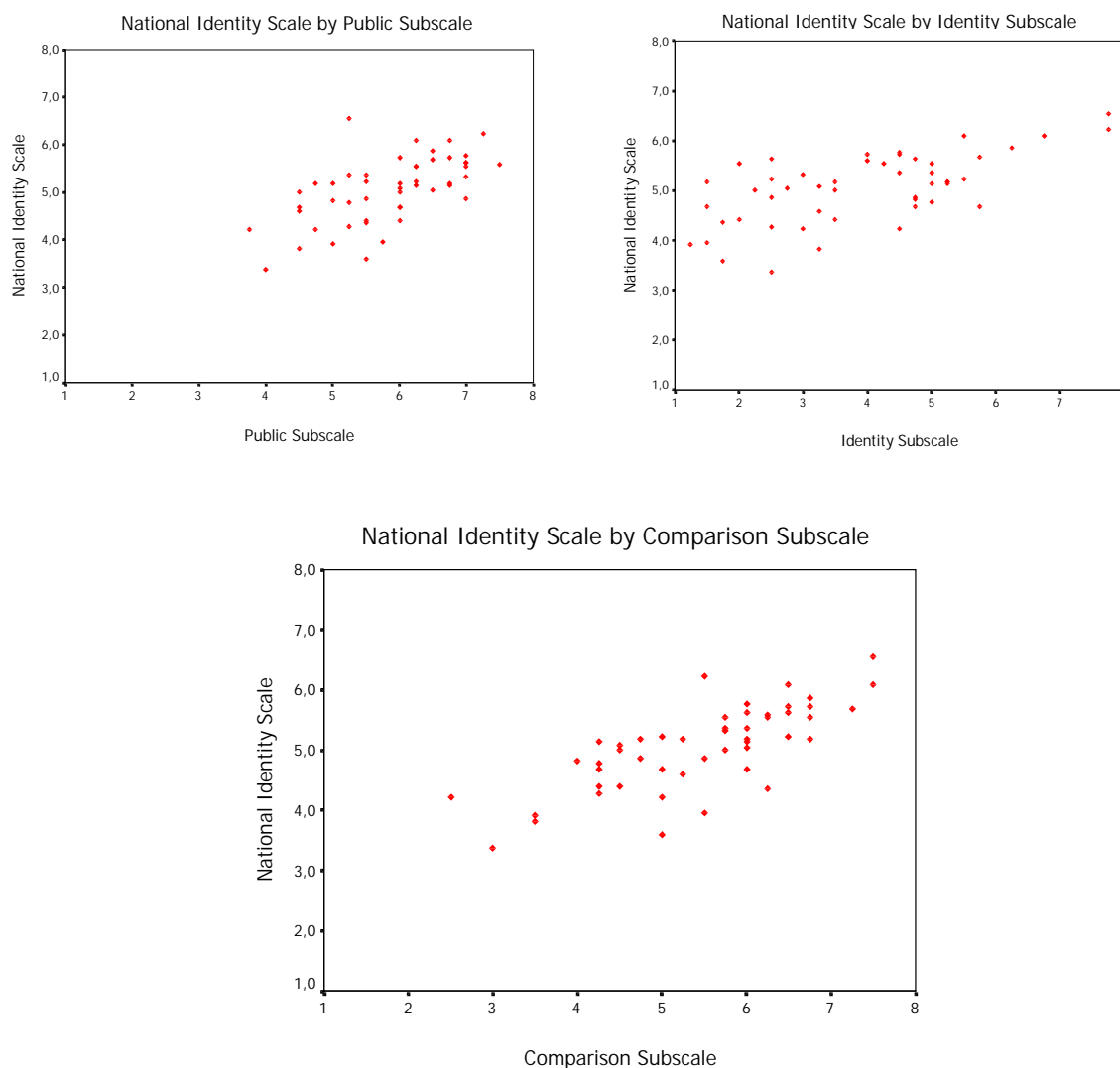
While the 4 new items are rather clearly subsumed under an additional 5th factor, this factor can in fact be interpreted as reflecting the aspect of comparison to outgroups. Though loadings of the items on this factor are only moderately high, this factor's variance contribution to the scale is nevertheless quite substantial (11,5%) and exceeds, for example, that of the 'public' factor (10,4%).

More essential, compared to the reformulated 16-items version (see table 1) our 20-items scale explains an even higher proportion of variance (68,04% to 63,43%) thus pointing to an increase in substance.

In looking more closely to the factor structures, **table 3** gives a quite consistent picture of membership, identity and private aspects. An interesting point is raised by the heavy loading of the (old) 'public' item no. 20 on the (new) 'comparison' factor. On one hand, this may be just an evidence that Luhtanen & Crocker have not fully ignored the comparison aspect in the construction of their CSES. On the other hand and in a more conceptual sense, public aspects (that is, outside views of the ingroup) can well

be expected to share some variance with comparison to outgroup aspects, which is in fact documented by a relatively high intercorrelation between public and comparison subscales (see **table 4**).

This point, however, deserves some further attention: Under the assumption that all other factors would replicate again, the question was whether these two aspects would contribute to a common factor in a way that a resulting 4-factorial structure would fit to our data more adequately than it was the case in the presented 5-factorial solution.

However, the results of an analysis restricted to 4-factors were much less convincing than the 5-factorial solution presented before. As expected, 'public' and 'comparison' items together created a common 4th factor while all other factors remained remarkably unchanged. Compared to an explained 68% by a 5-factorial solution, the reduced number of factors led to an important decrease to 60,8% in the total amount of variance explained, thus even falling back behind the 16-items CSES in this respect (see table 1). It is very clear that this decrease is due to the forced collapse of 'public' and 'comparison' aspects to a single common factor and, especially, this factor's decreased 14% contribution to the scale variance instead of separated contributions to the 5-factorial solution of either 10,4% by the public or 11,5% by the comparison factor.

6 Concluding Remarks

Based on the Collective Self-Esteem Scale (CSES) by Luhtanen & Crocker (1992) and in line with reasonings of the Social Identity Theory (Tajfel & Turner, 1986), we attempted to develop a measure of basic national identity. Compared to those of our first study, results of our second study impressively demonstrated that an addition of the aspect of comparison to other nations in fact led to an enrichment of that measure. Therefore, our findings definitely point to the necessity of completing the original CSES in this important respect.

The addition of the omitted comparison to outgroups aspect to the reformulated CSES, however, was not unexpectedly accompanied by some minor problems on the level of items which we think could but easily dealt with. We guess that certain changes in the formulations of one or two of these new comparison items may be sufficient to further increase their precision and, especially hoped, will serve to reduce their loadings on other factors as well. And furthermore, because item no. 20 has shifted from the 'public' to the 'comparison' factor under the 20-item version, it should be replaced.

As an empirical task following next we are planning certain studies on the validity of the new measure.

Used as a dependent or an independent variable in experimental and field settings, this new measure can hopefully serve not only for a more global distinction between subjects high or low in their basic national identity but also in terms of certain scale aspects. This was shown in a recent study by Long & Spears (1998) who found interesting patterns of subscales using the original CSES.

Table 5

National Identity Scale: means and standard deviations

Subscales and Items[a]	mean	standard deviation
Membership		
I am a worthy member of the nation I belong to (11)[b]	5.18	1.76
I feel I don't have much to offer to the nation I belong to (19)	6.99	1.29
I am a cooperative participant in the nation I belong to (3)[b]	5.59	1.49
I often feel I'm a useless member of the nation I belong to (6)	6.84	1.46
Private		
I often regret that I belong to this nation (13)	6.42	1.60
In general, I'm glad to be a member of the nation I belong to (15)[b]	6.00	1.50
Overall, I often feel that the nation of which I am a member is not worthwhile (4)	6.99	1.29
I feel good about the nation I belong to (18)[b]	5.63	1.60
Public		
Overall, my nation is considered good by others (9)[b]	4.71	1.42
Most people consider my nation to be more ineffective than other nations (20)	6.72	1.13
In general, others respect the nation that I am a member of (2)[b]	5.55	1.28
In general, others think that the nation I am a member of is unworthy (21)	6.53	1.28
Identity		
Overall, my nation has very little to do with how I feel about myself (14)	4.29	2.05
The nation I belong to is an important reflection of who I am (1)[b]	3.68	1.85
The nation I belong to is unimportant to my sense of what kind of person I am (16)	3.73	2.14
In general, belonging to this nation is an important part of my self-image (10)[b]	3.27	1.94
Comparison		
The nation I belong to is superior to other nations in many respects (7)[b]	5.16	1.74
All in all, my nation becomes less important in the world (8)	5.10	1.86
Overall, the nation I belong to plays a more important role than other nations (17)[b]	5.24	1.68
In competition with others my nation comes off worse	6.27	1.29

a.   The number in parentheses indicates the sequence of items in the scale.
b.   Item was reversed for scoring
N=49

Table 6

Inter-Item-Correlations for the National Identity Scale

	Member 2	Member 3 (rec)	Member 4	Private 1	Private 2 (rec)	Private 3	Private 4 (rec)	Public 1 (rec)	Public 2	Public 3 (rec)	Public 4	Identity 1	Identity 2 (rec)	Identity 3	Identity 4 (rec)	Comp 1 (rec)	Comp 2	Comp 3 (rec)	Comp 4
Member 1 (rec)	.671**	.594**	.425**	.047	.349*	.226	.343*	.359*	-.002	.239	.129	.195	.199	-.081	.141	.291*	.269	.168	.043
Member 2		.462**	.600**	.153	.192	.133	.212	.096	-.121	.071	.045	.047	-.067	-.194	-.222	.136	.267	.076	.041
Member 3 (rec)			.128	.129	.508**	.409**	.344*	.242	.008	.143	.255	.191	.161	.017	.235	.296*	.207	.283*	.097
Member 4				.085	-.085	.061	.186	.061	-.069	-.017	.129	-.211	-.121	-.438**	-.350*	.155	.309*	.040	-.046
Private 1					.526**	.561**	.484**	.082	.087	.112	.326*	.179	.079	.255	.250*	.227	.117	.205	.060
Private 2 (rec)						.689**	.584**	.221	.304*	.214*	.271	.260	.409**	.301*	.484**	.425**	.144	.345*	.284*
Private 3							.711**	.293*	.306*	.292*	.547**	.141	.272	.160	.153	.324*	.155	.224	.258
Private 4 (rec)								.419**	.000	.217	.434**	.101	.220	.107	.112	.314*	.159	.065	.119
Public 1 (rec)									.093	.653**	.335*	.079	.171	.083	.093	.270	.133	.197	-.045
Public 2										.210	.415**	.078	.225	.056	.128	.348*	.215	.379**	.375**
Public 3 (rec)											.398**	-.070	.266	.027	.110	.325*	.250	.311*	.107
Public 4												-.002	.080	-.100	-.027	.380**	.134	.287	.155
Identity 1													.362*	.614**	.544**	.304*	-.099	.253	-.032
Identity 2 (rec)														.669**	.560**	.477**	.064	.350*	.184
Identity 3															.684**	.293*	-.077	.269	-.029
Identity 4 (rec)																.383**	-.029	.551**	.180
Comp 1 (rec)																	.323*	.701**	.223
Comp 2																		.172	.206
Comp 3 (rec)																			.220

*   Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).   N=49

7 Literature

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