Why Does Asian Food Taste So Different From Western Food?

Nature has published a fascinating paper that solves a seemingly silly but very interesting question: why do Western and Asian foods taste so different? After analyzing 56,498 recipes the answer is in the way they pair 381 ingredients.

Why do they taste different?

According to the study, Western cuisines have a tendency to pair ingredients that share many of the same flavor compounds. East Asian cuisines, however, do precisely the contrary, avoiding ingredients that share the same flavor compounds. The more flavors two ingredients share, the less likely they would be paired together in Asian kitchens.

Why is this important?

This is the first time that an experimental study has confirmed what only was an hypothesis over the past decade:

This food pairing hypothesis has been used to search for novel ingredient combinations and has prompted, for example, some contemporary restaurants to combine white chocolate and caviar, as they share trimethylamine and other flavor compounds, or chocolate and blue cheese that share at least 73 flavor compounds.

However, since Asian food works by avoiding food pairs, their analysis also destroys the idea that flavor pairing is the only way to achieve amazing new plates. According to the study, this “discovery of patterns that may transcend specific dishes or ingredients” may open new ways to cook.
How do flavors connect?

This graphic shows the backbone of the flavor network: "each node denotes an ingredient, the node color indicates food category, and node size reflects the ingredient prevalence in recipes. Two ingredients are connected if they share a significant number of flavor compounds, link thickness representing the number of shared compounds between the two ingredients."

I can’t wait to taste how cooks all over the world use this research to create new weird flavors for me to enjoy. [Nature]

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peasant slayer
18 Dec 2011 9:17 PM

It's all in the sauces. Western food uses thick complex sauces. Asian food uses thinner more single flavor sauces.

midnightz @peasant slayer

I find that traditional Western food is rarely complex. Certainly British food does not seem to be.

KnightNZ @midnightz

I think Britain is exempt from food-related comparisons on average. As are the Dutch.

Meredith McKay @peasant slayer

Chinese Five Spice, perhaps the most common seasoning used in that part of the world aside from soy sauce, is hardly monogustatoric.

Thick soy sauce (common), oyster-flavor sauce, mushroom-flavor sauce and the like aren't exactly "thin".

Edited by Meredith McKay at 12/18/11 9:57 PM

El Sabor Asiático @peasant slayer

I take it you’ve never had Vietnamese food?

salt_bagel @peasant slayer

What about Indian food? They have whole lists of different masalas, all mixed from 5-10 different spices ground together in various ratios, and that just makes the base component of the sauce.

River @peasant slayer
I think this study sort of answers the question, or did we read something different?

ScaryMerry @peasant slayer
I think that's part of why I don't like asian food. I can't stand soy sauce.

Dominic Corona @peasant slayer
traditionally, italian cuisine is far from complex. most americanized versions of it are quite complex, however

Menoseloso @ScaryMerry
Soy sauce is far from the only "Asian" sauce. While it's extremely common, it is just one of the vast number of sauces used in different Asian cuisines. Try some Korean food for an example of a cuisine that uses soy sauce sparingly.

ScaryMerry @Menoseloso
I've tried it (one of my friends is studying abroad from Korea). Asian food is just not to my taste.

mputtr @peasant slayer
you got it the other way round.
Asian sauces are usually much more complex and filled with a massive variety of ingredients compared to western sauces.
you guys got your ketchup and your hollandaise and your alfredo sauce but we got curry, THAT alone has more flavors than half of your "thick complex sauces".

skankattack @Meredith McKay
WTF does monogustatoric mean anyways?

vermette @skankattack
Break it down;
mono-gust-at-oric
Mono: One.
Gust: Wind.
At: At.
Oric: Some medieval guy. Likely a knight.

So monogustatoric means "One Wind Blows at Sir Oric Von Lichtenshtien"

... I could be wrong.

BT Onedem @Meredith McKay Exactly.
Why Does Asian Food Taste So Different From Western Food?

Seriously? You must be trolling, because you couldn’t be more wrong.

Seriously? You must be trolling because you couldn’t be more wrong.

You have it the wrong way around.
American "Italian" food is simplified and essentially stripped of regional differences. If you were to compare the cuisine of Lombardy with that of Sicily, you’d see quite a difference.

they’re definitely different, no argument there. but look at an americanized version of a basic marinara sauce compared to one that is more traditional: there’s a lot more that goes into the american one (several more spices, for example) . My point wasn’t that they aren’t different, but that they have fewer ingredients.

"Single flavor", from mono: one; gustatory: related to flavor. Actually, I made it up.
I think I like vermette’s analysis more, though.

Western cuisines have a tendency to pair ingredients that share many of the same flavor compounds. East Asian cuisines, however, do precisely the contrary, ”
BAM... these kids cant read.....talking about thick sauces.. and what not.

Ulrich Von Lichtenshtien was a peasant turned knight, Oric was a home computer popular in Britain in the 80s.
So Monogustatoric means “one wind blows my oric computer”, which is a fancy way to say “fan”

That would seem to be implied by what Dominic Corona said. You must have misread his comment.

Traditional Dutch cuisine doesn’t count as 'food'. It’s stomach-filling, meant only to keep your innards from trying to digest themselves.
I’d say almost definitely the opposite, asian sauces in general tend to use a far more diverse range of spices and flavours than western sauces (ok maybe the taste is for a ‘thinner’ one. But in Western sauces...like say gravy, the thickness comes from flour...which you can hardly count as a flavour and the tastes tend to be pretty one-dimensional which is what this article tends to point out. And the other thing, is precisely your fixation on the ‘sauce’. American cooking I find, especially tends to rely on sauces. The actual dish or meat just acts as texture, i.e. white dry turkey breast with gravy, or french fries for ketchup. A lot of asian preparation of meats is designed to not need a sauce. Think, tandoori chicken, or chinese white-cut chicken or char siu, or even things like sushi. Soy Sauce is not so much a sauce, but more like a more flavourful salt and pepper substitute u sprinkle on. And the thinner sauces stem from that as well - there's no need for a thick layer of sauces, because the flavours are in the marinade or preparation of the meat.
So thick vs thin maybe, but it stems from a different philosophy as to the function of sauces. Complexity, definitely not. (Unless you're basing entirely on american-chinese cornstarchy sauces...which should really count as american food.

whats complex about a bechamel sauce?

butter, flour, milk, salt, pepper, nutmeg

the anise in five spice always seems to overtake my palate(pallet? its too late or too early)

actually ketchup is supposedly based on a old Chinese sauce

It is true that the better the ingredients, the less you have to do to it.

saute some onions and garlic add some crushed tomatoes and chopped basil=easy pasta sauce

Mostly thinner single flavor sauces? Sigh. Panang is pretty thick, and while you are at it. Try it out and see if you can guess how many ingredients does this simple sauce have.
You may have made it up, but you’re right, Meredith. Monogustatoric does indeed mean single flavor. [en.wikipedia.org]

Given the usual scenario, I’d say at least a dozen.

You don’t like any Asian food? No Indian or Himalayan or Thai or Korean or Japanese or Chinese or Turkish or Persian food at ALL? That’s crazy talk lady. You can’t mean that.

I’ve yet to try any that I really like. And I’ve tried a lot. Both American and authentic (I’m friends with a lot of students studying abroad from various Asian countries and I’m a part of the Japanese language program at my school). So far the only I’ve particularly liked was some sushi one of my Chinese friends made that had beef, egg, and carrot in it. I’ve just always been a picky eater and Asian food just doesn’t agree with my palate, I guess.

Actually, it’s not really the same thing. [en.wikipedia.org]

Here is the basic ingredient for JUST the red panang paste.

Chilly peppers (5 large dried red, seeded and soaked)
Galangal (a root) (1 tsp, sliced)
Lemongrass (fresh - 1 tsp, sliced)
Coriander (1 tsp)
Cilantro (root or stem - 1 tsp, sliced)
Cumin (1 tsp)
Garlic (1 clove, pressed)
Shallots (5, sliced)
Peanuts (optional, 1/4 cup)
Kaffir Lime (the rind - 12 leaves, sliced)
Shrimp paste (optional, 1 Tbsp)
Salt (sea salt - 1 tsp)
Pepper (white - 2 tsp)

Then you add this paste to Coconut cream or milk, some sugar and some fish sauce. Throw in some sliced meat, sliced bell peppers, sliced onions. Then top it with crushed roasted peanuts, and kaffir lime leaves.

Once done, you top it over rice....

Yeah... very simple sauce.
KnightNZ  @raytheater

Cilantro and Coriander are different names for parts of the same plant. I can't eat any significant quantities of either as it triggers my asthma.

I wouldn't call it a particularly complex sauce, but yes, it's certainly not simple.

Gunadz  @ScaryMerry

Not all 'asian' food has soy sauce in it mate, you just need to branch out a bit. Basing your impression of all asian cuisines on soy sauce is like saying you hate all western food because you dislike ketchup.

greyfox_typezero  @mputtr

did you read the first part of that wikipedia article? under history

"In the 1690s the Chinese mixed together a concoction of pickled fish and spices and called it kôe-chiap or kê-chiap (鲶汁) meaning the brine of pickled fish (鲶, carp; 汁, juice) or shellfish.

By the early 18th century, the table sauce had made it to the Malay states (present day Malaysia and Singapore), where it was discovered by British explorers, and by 1740, it had become a British staple.[citation needed] The Malay word for the sauce was kêchap. That word evolved into the English word "ketchup". I said based on not still made from a Chinese recipe.

to be fair though a lot of the herbs and spices originally came from the Middle East and Asia

mputtr  @greyfox_typezero

Did you not note that i mentioned the first part of the article about that? I specifically referred to the modern day ketchup.

quoting what i said earlier: "the ketchup i'm talking about is the modern day tomato paste that is used worldwide. The original, is a concoction of a variety of spices and sauce."

the original that i referred to was the chinese one. if you noted: the modern day american ketchup barely shares anything with the original if it even shares anything.

and yes, most herbs and spices came from the east. So the OP's original claim about the difference is all in the sauce come from only amateur and bad cooks that rely purely on the sauce to cover up the bland taste of their main dish. Any real cook would never say that it's all about the sauce. It's about how you prepare the meal from star to finish.