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Myths around Web Services or the dark side of Web services

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**Extensions to EAI solutions and conventional middleware
to facilitate system integration**

**A vehicle for electronic commerce
and wide area information systems**

**The greatest thing about software is
that it is not subject to natural laws and
we are all too willing to ignore
common sense**

A ridiculous proposal ...



**I use a bicycle to go to work,
therefore
I can use a bicycle for interplanetary transportation**

**We can do SOAP and WSDL,
therefore
we can now completely automate electronic commerce
and wide area distributed systems**

False premises, false conclusions



**To use a bicycle for interplanetary transportation
we need to add more gears and increase the
capacity of the attached water bottle**

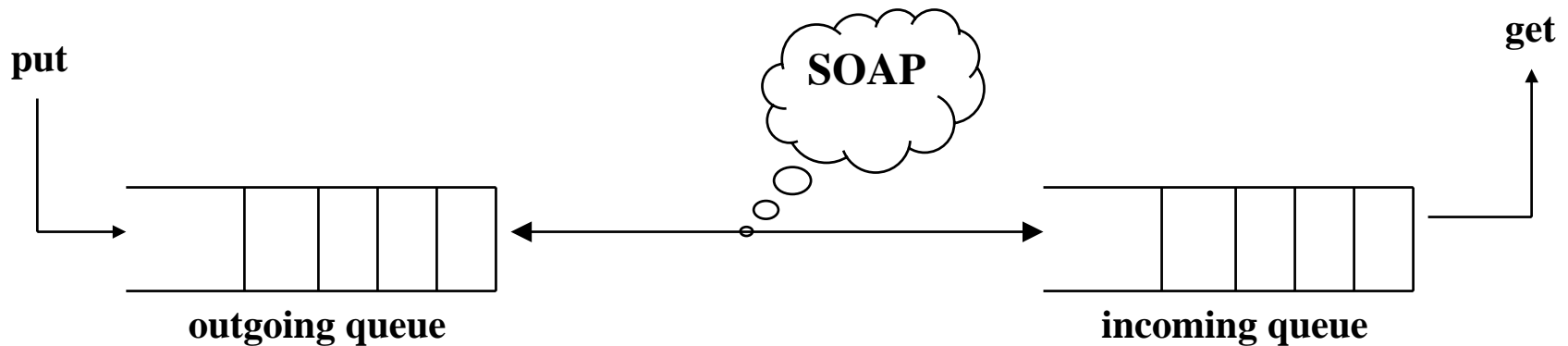
**To repeat the success of conventional middleware at
the WAN level we need to adopt WS-Coordination,
WS-Transactions and BPEL4WS ...**

... and this is what all customers want

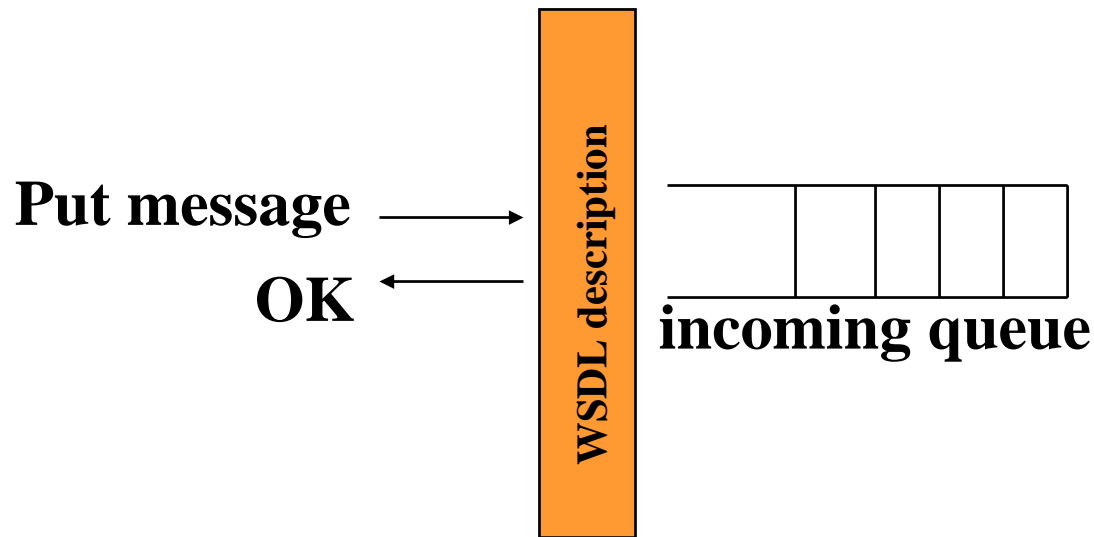
**Today, the dark side of Web services is
anything beyond SOAP and WSDL ...**

**... but it is not even clear what is the
best way to use SOAP and WSDL**

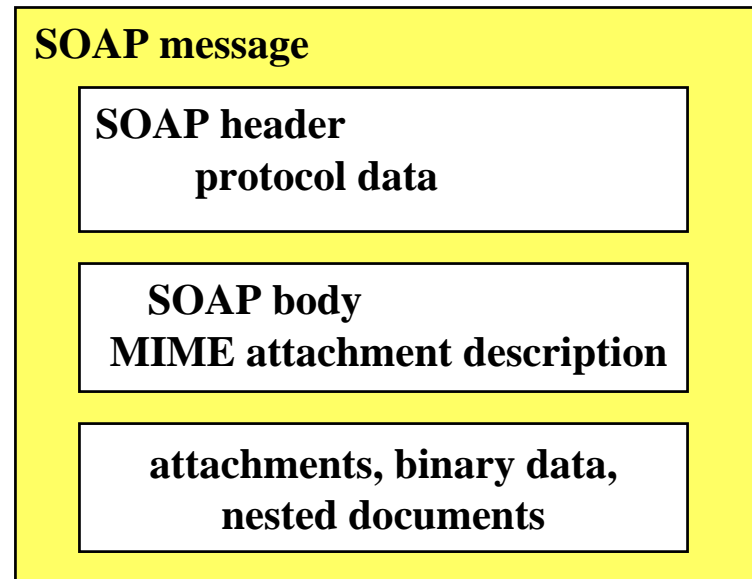
SOAP will be used as a low level communication primitive to implement peer-to-peer wide area messaging systems (in the sense of not having a centralized controller as it happens in conventional message oriented middleware)



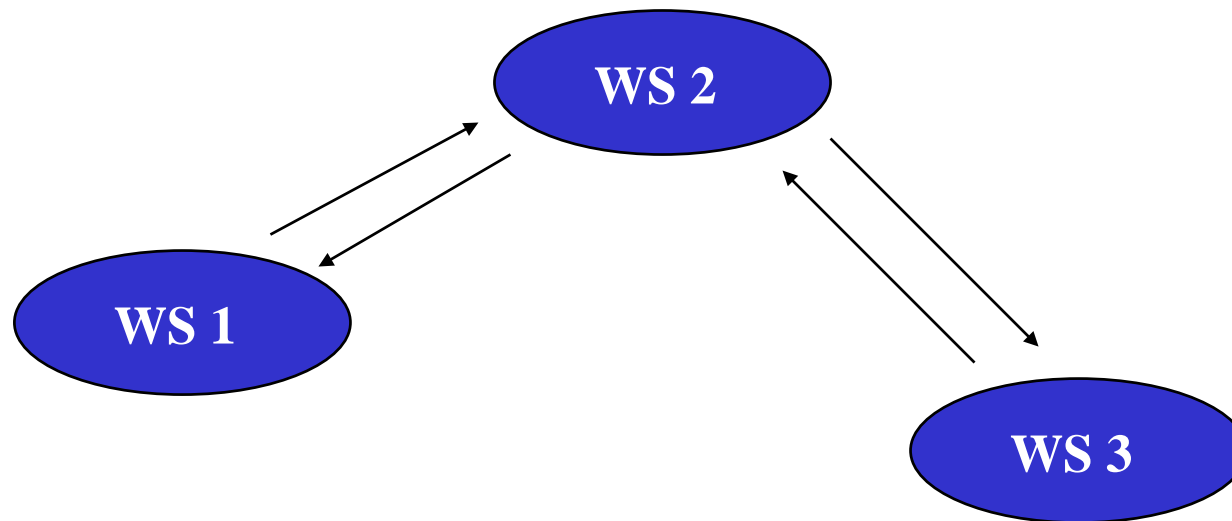
WSDL will be used to describe the interface to the service queue without specifying the content of the messages in the queue



With SOAP used for implementing queues and WSDL describing the access point (but not the service), XML will become the syntax of the plumbing, not the syntax of the applications



Even complex, multi-party business protocols and conversations will be supported only at the level of pair-wise interactions



Myths are research opportunities



- The current confusion is a challenge but a great opportunity:
 - ⤵ Web service messaging systems (on top of SOAP but providing all the features needed in a real messaging system)
 - ⤵ Wide area message oriented middleware (a queuing system with a Web service interface using SOAP for interactions between queues)
 - ⤵ Description and reasoning about composite Web services (the actual conversations resulting from electronic commerce exchanges)
 - ⤵ All flavors of wide area distributed systems using your own home-grown variety of WS-specs (like companies are doing): Web service JDBC, federation and replication on a Web service interface, Web service query interfaces, ...