SMS, where’s the beef?

Torsten Schaub
University of Potsdam
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University of Potsdam

- Happy Birthday, SMS!
SMS, where's the beef?

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SMS, where’s the beef?

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- *Happy Birthday*, SMS!
- Birthdays are about family, viz.
  - ancestors,
  - kids, and
  - TNG.
SMS’s family tree

LP  NMR

SMS

late 70ies

late 80ies
SMS’s family tree

LP → SMS
NMR → SMS

late 70ies
late 80ies

\[
\text{SMS} = \text{LP} + \text{NMR}
\]
NMR, where’s the beef?

- Ray Reiter, KR’92, “Twelve Years of Nonmonotonic Reasoning Research: Where (and What) Is the beef?”
NMR, where’s the beef?

- Ray Reiter, KR’92, “Twelve Years of Nonmonotonic Reasoning Research: Where (and What) Is the beef?”
  - NMR is a “flourishing subculture” making many outside researchers “wonder what on earth this stuff is good for.”
NMR, where’s the beef?

  - NMR is a “flourishing subculture” making many outside researchers “wonder what on earth this stuff is good for.”
  - NMR provides “important insights about, and solutions to, many outstanding problems, not only in AI but in computer science in general.”, among them, “LP implementations of NMR”
NMR, where’s the beef?

  - NMR is a *flourishing subculture* making many outside researchers *wonder what on earth this stuff is good for.*
  - NMR provides *important insights about, and solutions to, many outstanding problems, not only in AI but in computer science in general.*, among them, *LP implementations of NMR*

- **Matt Ginsberg, NMR’94**, gloomy prophecies of the impending demise of NMR
NMR, where’s the beef?

  - NMR is a “flourishing subculture” making many outside researchers “wonder what on earth this stuff is good for.”
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- **Savior**, the computational embodiment of NMR
NMR, where’s the beef?

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- **Matt Ginsberg, NMR’94**, gloomy prophecies of the impending demise of NMR

- **Savior**, the computational embodiment of NMR, viz. **SMS et al.**
SMS’s family tree

LP → NMR → SMS

late 70ies

late 80ies
SMS’s family tree

LP  NMR

SMS

ASP

late 70ies
late 80ies
late 90ies
SMS’s family tree

LP → SMS → ASP
NMR → SMS → ASP

ASP = LP + NMR

late 70ies
late 80ies
late 90ies
SMS's family tree

LP → SMS → ASP

NMR → SMS → ASP

late 70ies

late 80ies

late 90ies

ASP = LP + NMR + KR + DB + CP
ASP, what can you do for a living?

- bio-informatics [TB04, DGN⁺08],
- configuration [SN99],
- database integration [LGI⁺05],
- diagnosis [EFLP99],
- hardware design [EW04],
- insurance industry [BDKI05],
- model checking [HN03],
- phylogenesis [KMT⁺06, BEE⁺07],
- planning [Lif02],
- security protocols [AM01],
- etc.
ASP, what can you do for a living?

- bio-informatics \([TB04, DGN^+08]\),
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- phylogensis \([KMT^+06, BEE^+07]\),
- planning \([Lif02]\),
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- etc.

SMS’s family tree: TNG

LP → SMS → ASP
NMR → SMS → ASP

late 70ies
late 80ies
late 90ies
SMS’s family tree: TNG

LP → NMR → SMS → ASP → *ASP

late 70ies → late 80ies → late 90ies → early 10ies
ASP, what's that?
ASP, what’s that?

- It’s not an *iPod*, it’s not an *iPhone*,
iASP, what’s that?

- It’s not an *iPod*, it’s not an *iPhone*, and it’s nothing like *iGoogle*.
ASP, what’s that?

- It’s not an *iPod*, it’s not an *iPhone*, and it’s nothing like *iGoogle*. It’s nothing you directly use,
ASP, what’s that?

- It’s not an iPod, it’s not an iPhone, and it’s nothing like iGoogle. It’s nothing you directly use, it’s nothing integrative.
ASP, what’s that?

- It’s not an *iPod*, it’s not an *iPhone*, and it’s nothing like *iGoogle*. It’s nothing you directly use, it’s nothing integrative.
- ASP is *intelligent* (of course!)
ASP, what’s that?

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- ASP is intelligent (of course!) but not yet easily integrable!
  ➜ A different viewpoint!
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ASP is intelligent (of course!) but not yet easily integrable!

A different viewpoint!

Idea Look for applications or businesses
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  - A *different viewpoint*!
- **Idea** Look for applications or businesses that can be solved by ASP
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- **Idea** Look for applications or businesses that can be solved by ASP *among others*!
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  ➤ *A different viewpoint!*

- **Idea** Look for applications or businesses that can be solved by ASP *among others!*

- My favorites
  - Bio-informatics
  - Assisted Living
  - General Game Playing
Some bottlenecks on the way

- Performance, eg.
  - Robustness (not only speed!)
  - Grounding

- Usability, eg.
  - Software Engineering (eg. debugging)

- Applicability, eg.
  - Extensibility (eg. reasoning modes, theories)
  - Interoperability (eg. interfaces)
Afterthoughts

- Good news!
Afterthoughts

- Good news! ASP is out of puberty!
Afterthoughts

- Good news! ASP is out of puberty!
- Bad news!
Afterthoughts

- Good news! ASP is out of puberty!
- Bad news! ASP comes from a small community!
Afterthoughts

- Good news! ASP is out of puberty!
- Bad news! ASP comes from a small community!
  - Empower the community!
  - Unite communities!
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- Quest: Declarative programming!
Afterthoughts

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- Quest: Declarative programming!
- What about the beef...?
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• What about the beef...?
  No slaughter!
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  No slaughter! Milk it!
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- Quest: Declarative programming!
- What about the beef...?
  No slaughter! Milk it!
All’s well that ends well (hopefully!)
All’s well that ends well (hopefully!)

ASP inside.
References


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